

FIG. 1

09598270.062100

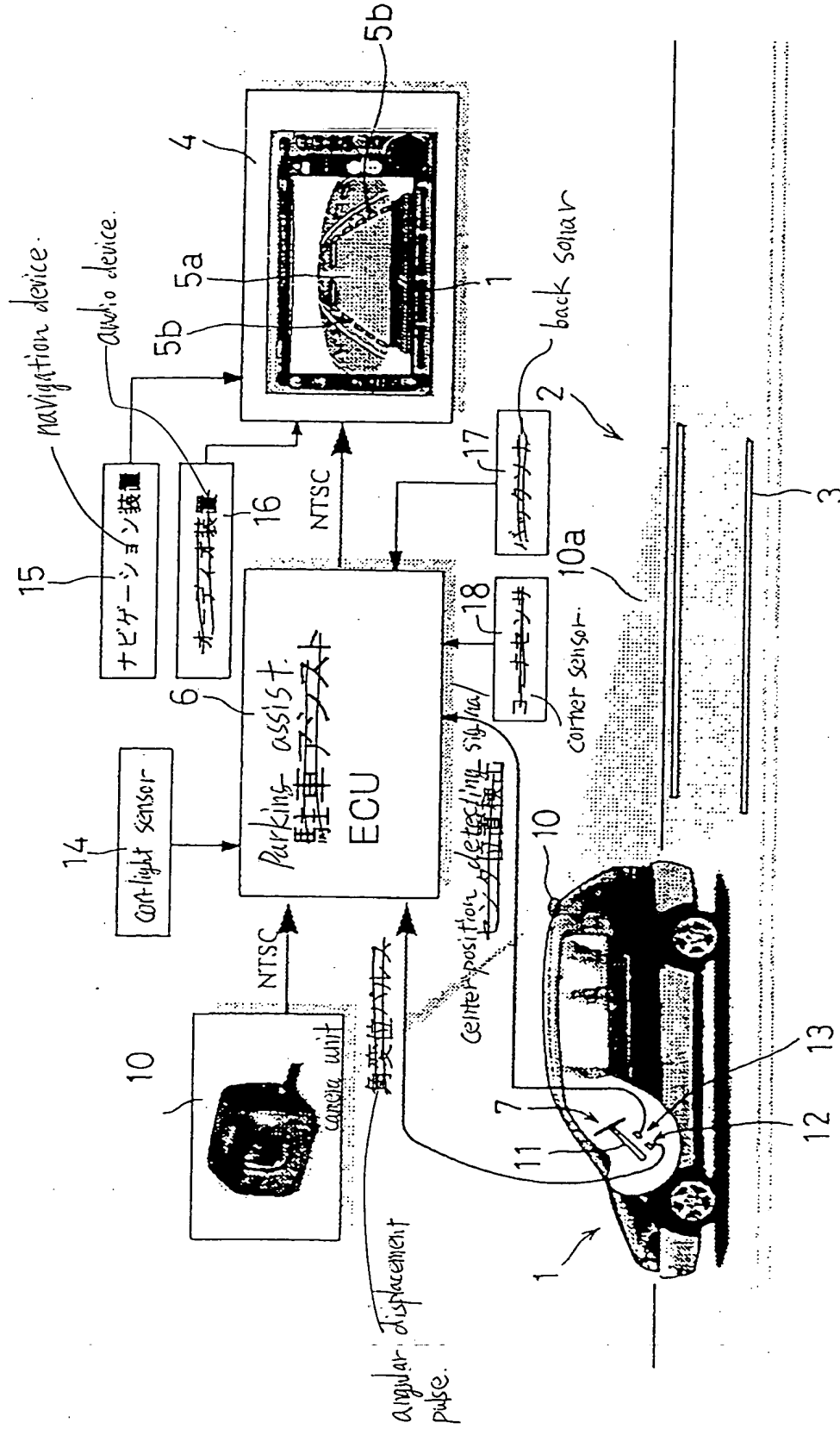


FIG. 3

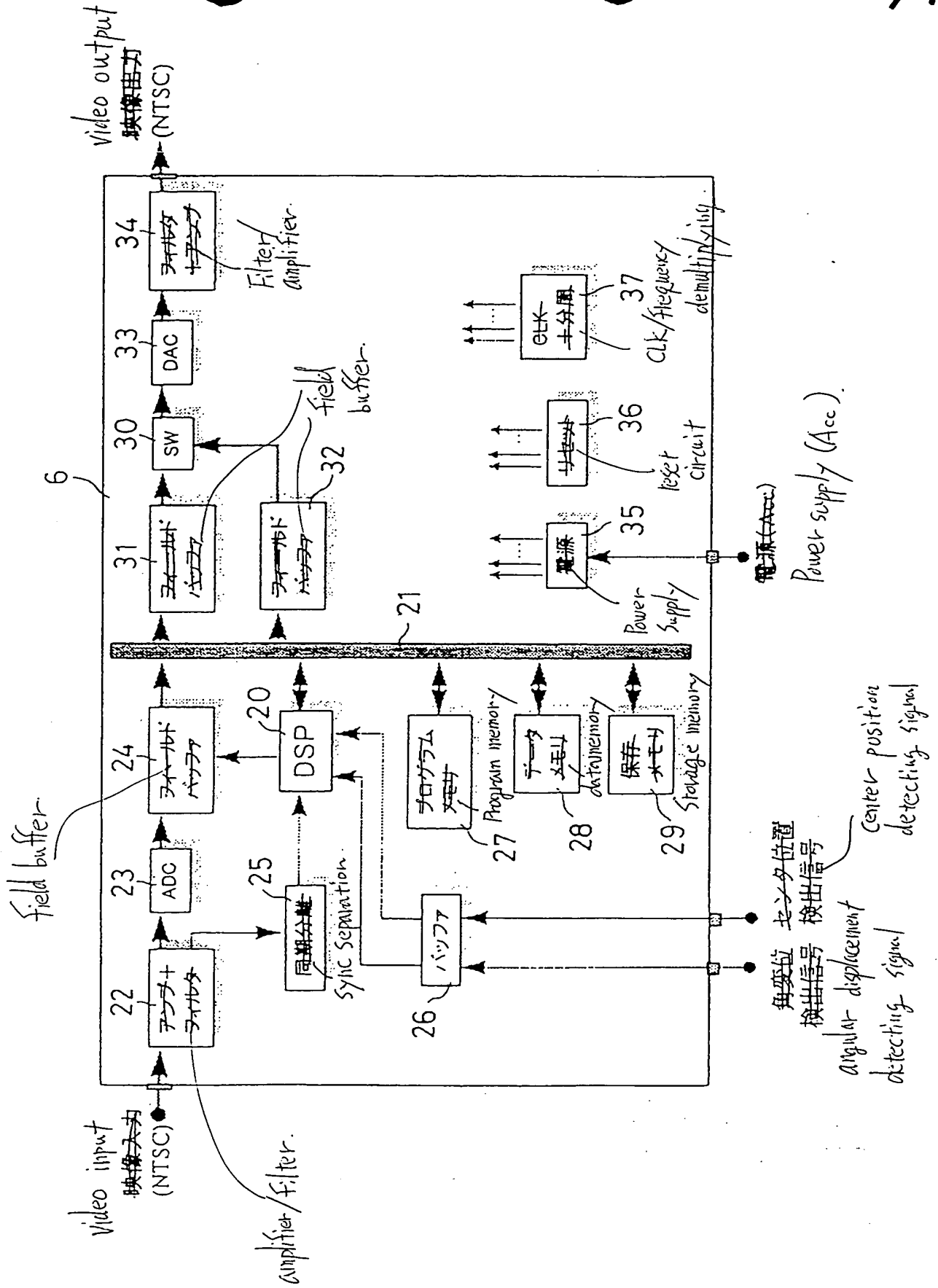


FIG. 4A

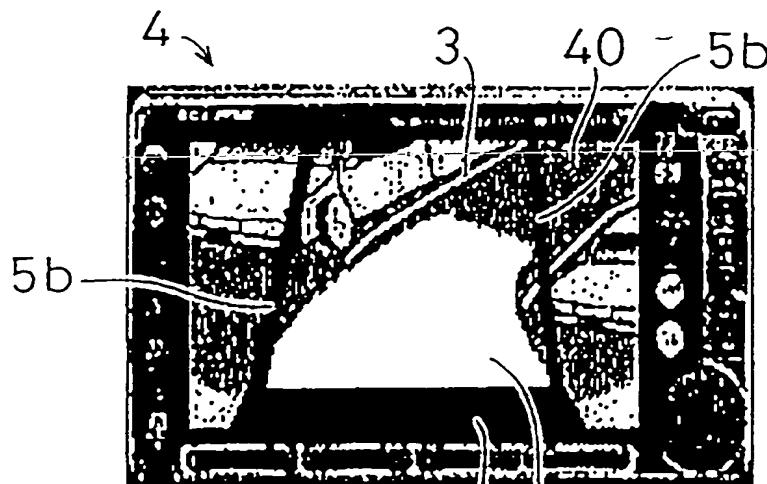


FIG. 4B

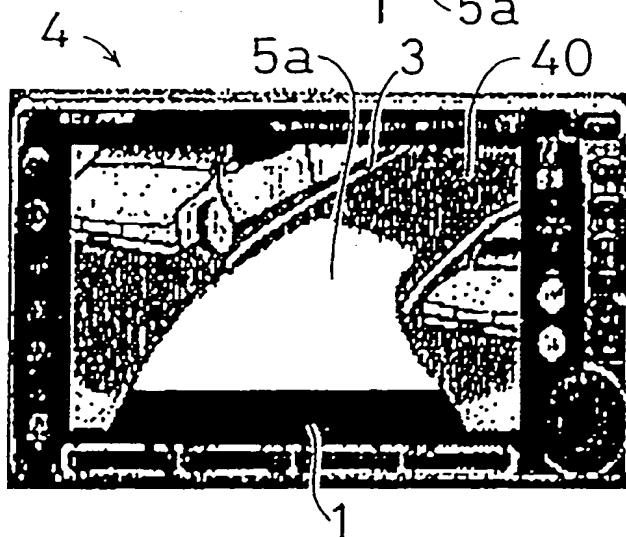
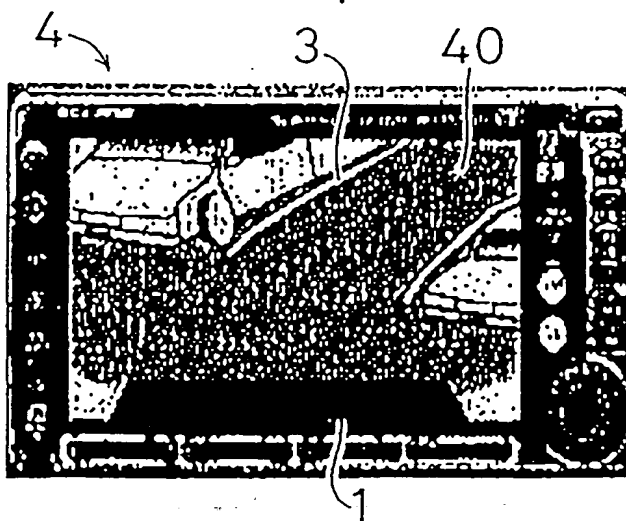
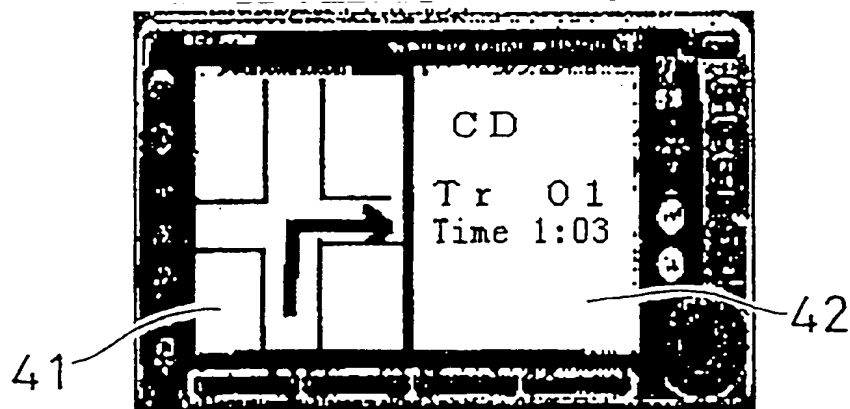


FIG. 4C



4 FIG. 5



4 FIG. 6

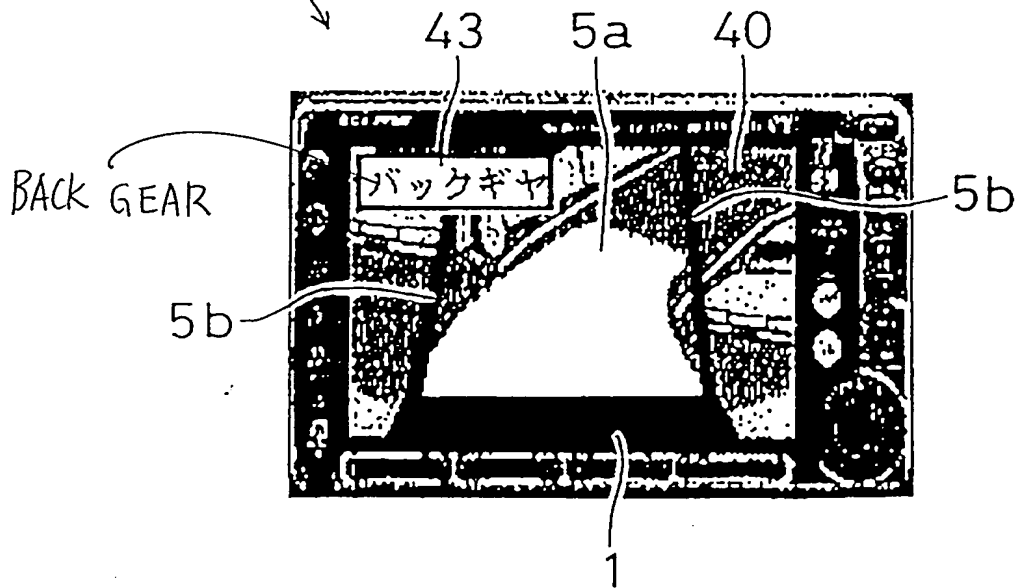
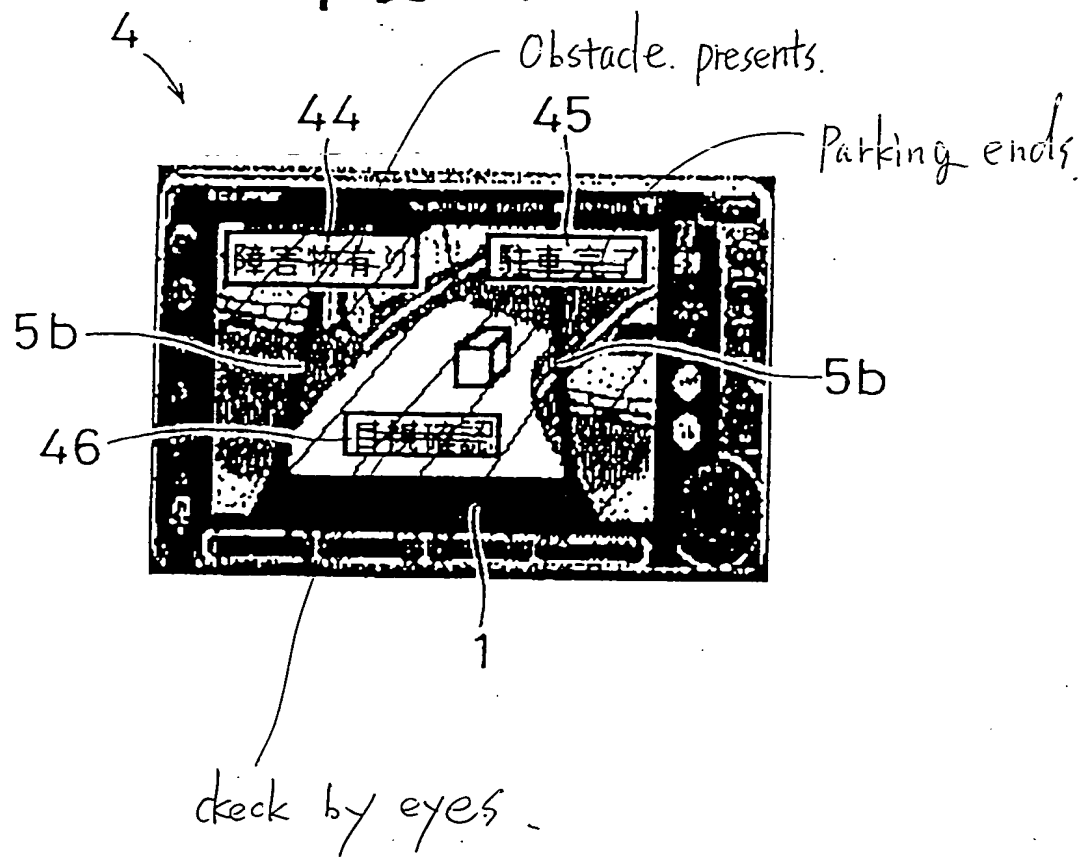


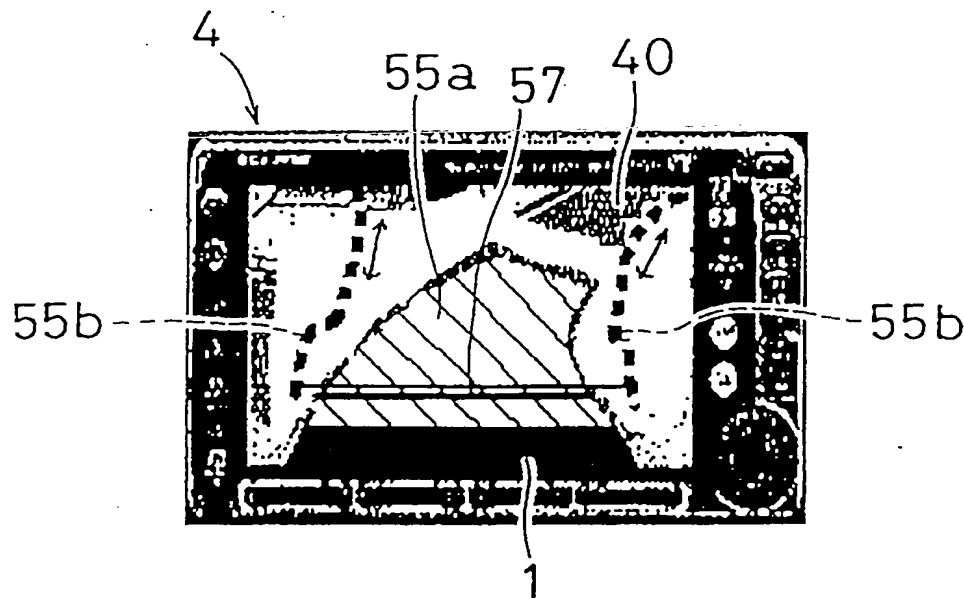
FIG. 7



001290-07286560

FIG. 9

8/45



001290" 02286560

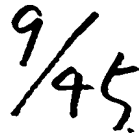


FIG. 11

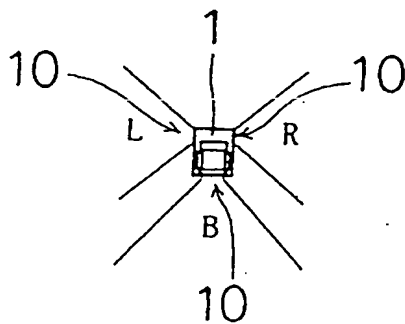


FIG. 12.

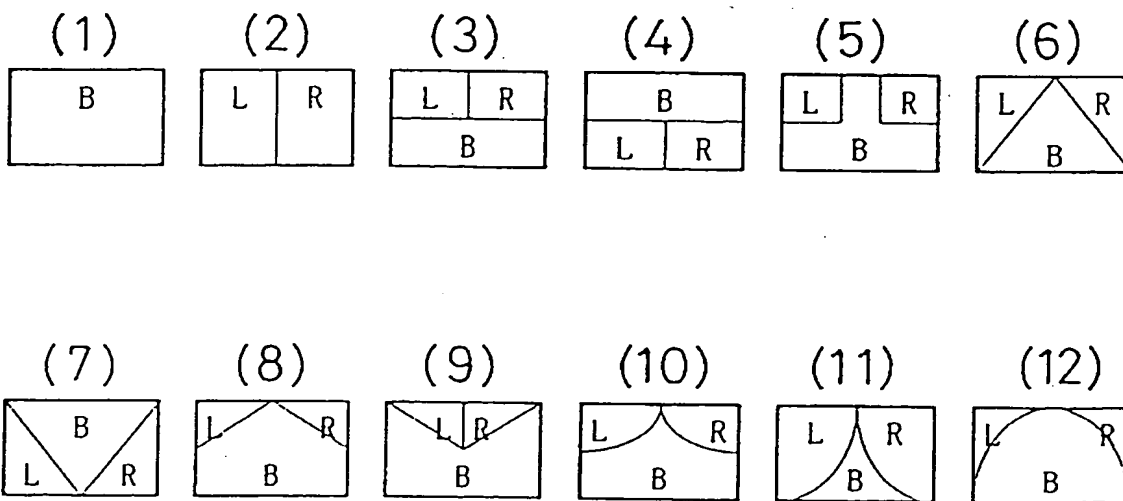


FIG. 13.

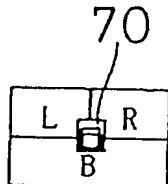


FIG. 14A FIG. 14B FIG. 14C FIG. 14D

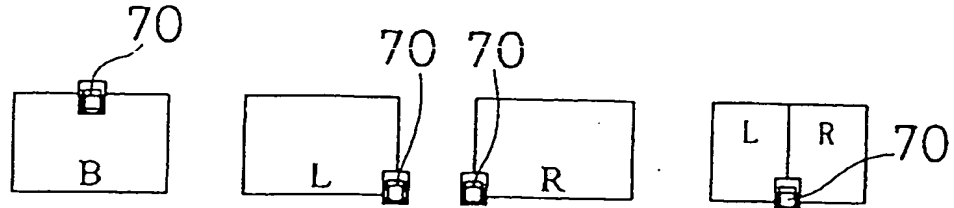


FIG. 15

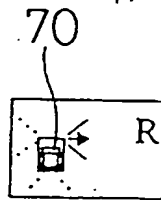


FIG. 16

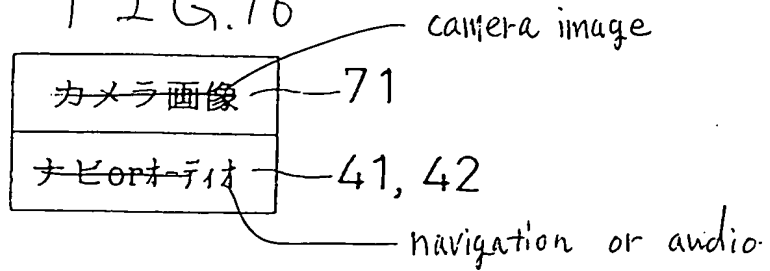
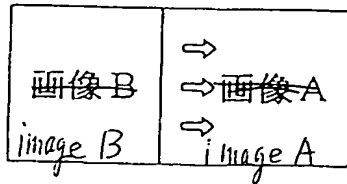
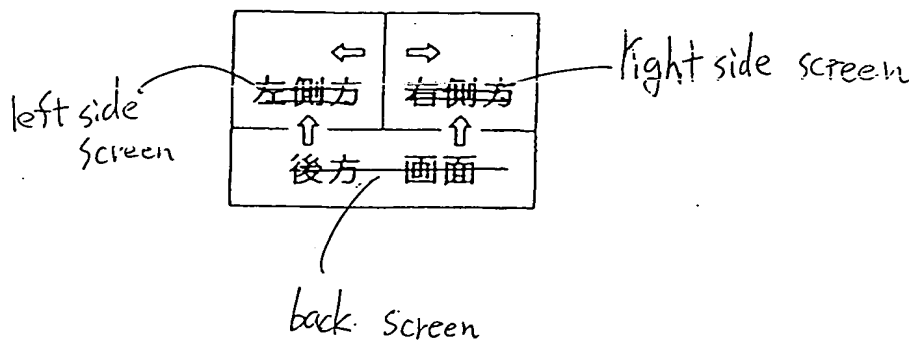


FIG. 17



12/45

FIG. 18



001290-07286560

FIG. 19

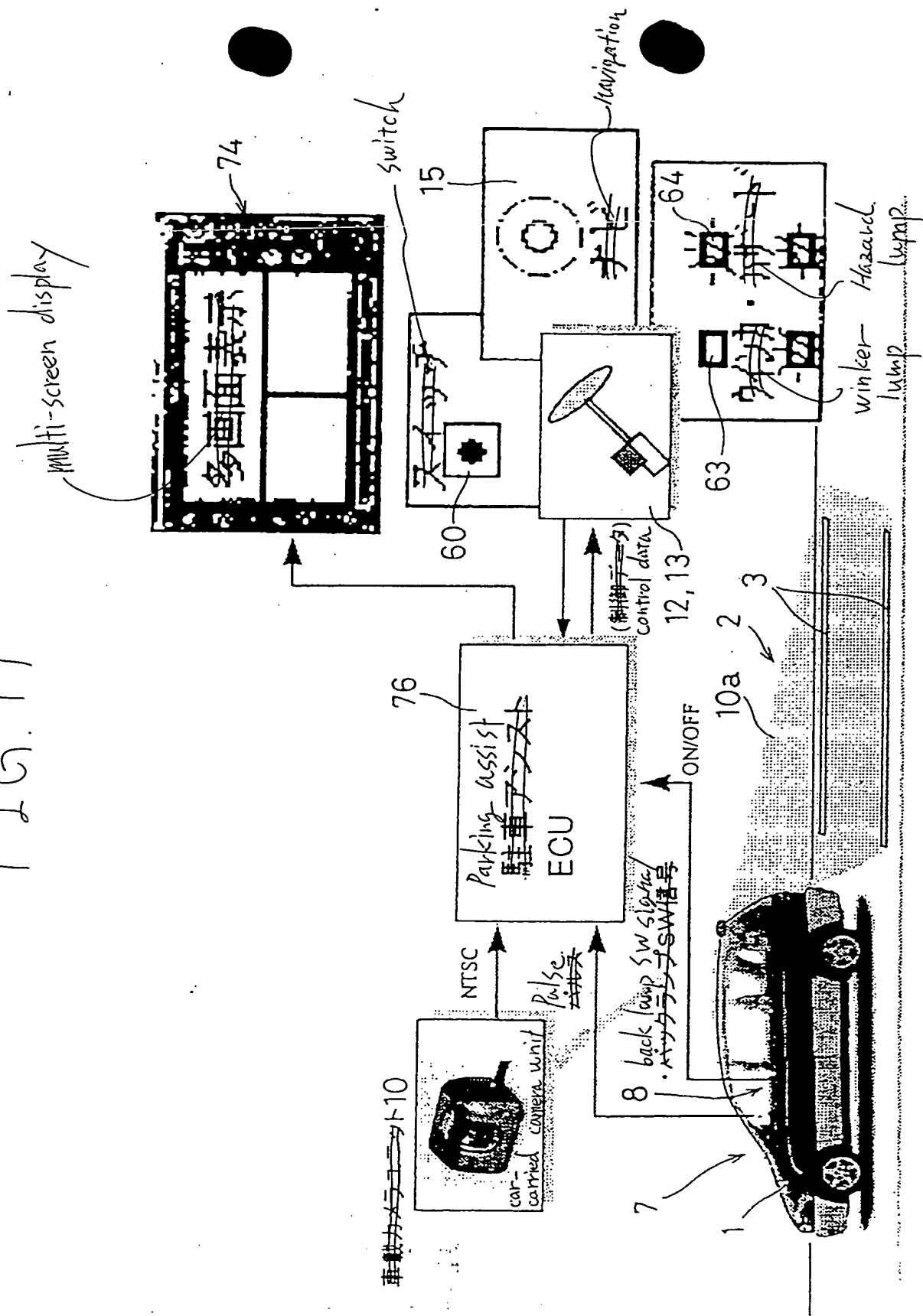


FIG. 20B

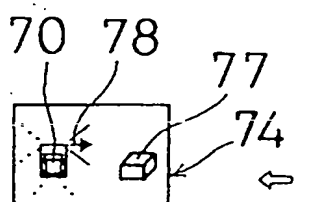


FIG. 20C

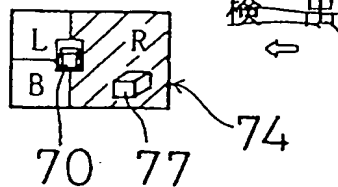


FIG. 20A

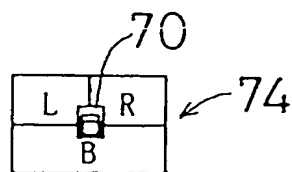


FIG. 21A

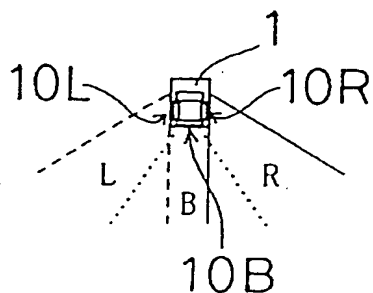


FIG. 21B

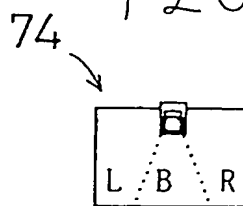


FIG. 22A

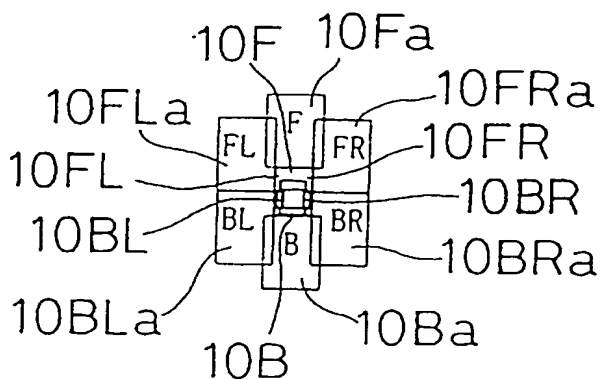
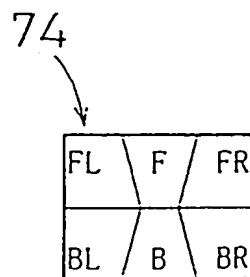


FIG. 22B



16/45

FIG. 24A

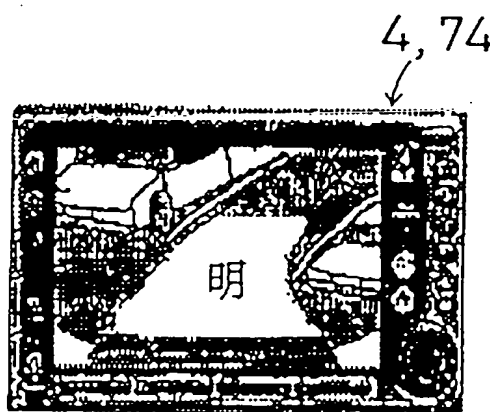


FIG. 24B

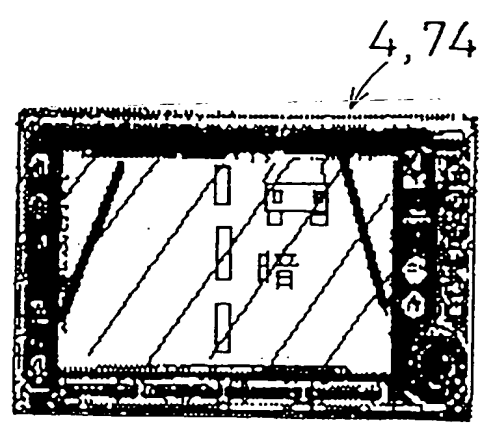
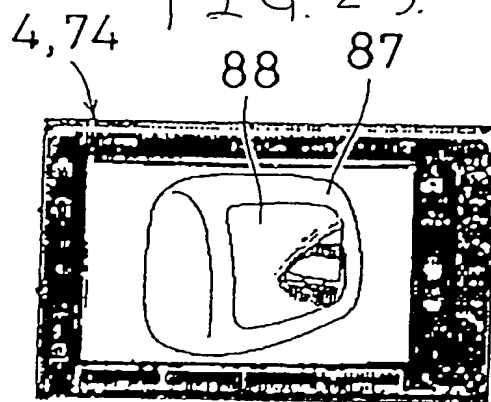


FIG. 25.



09598270-062100

FIG. 26

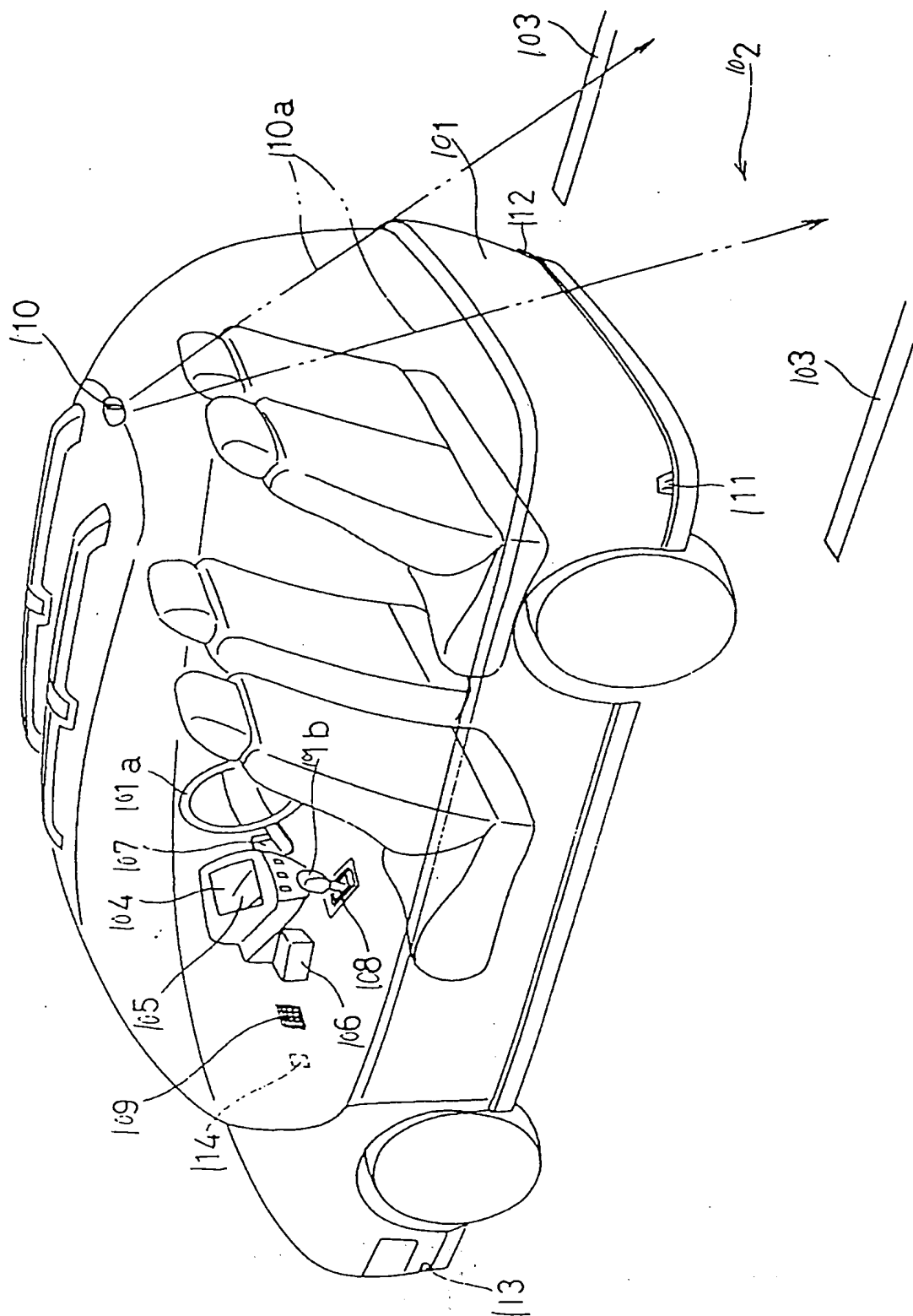
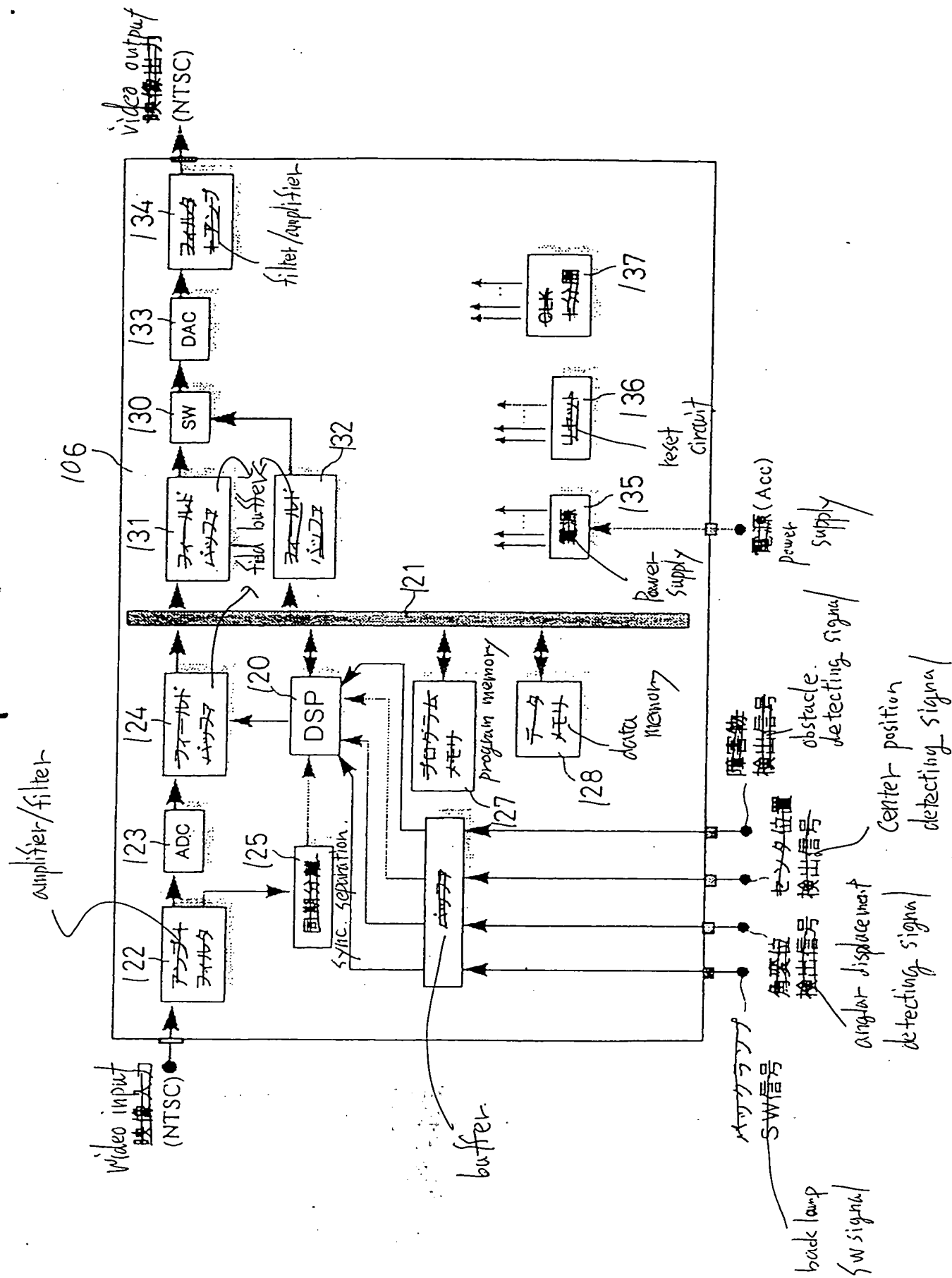
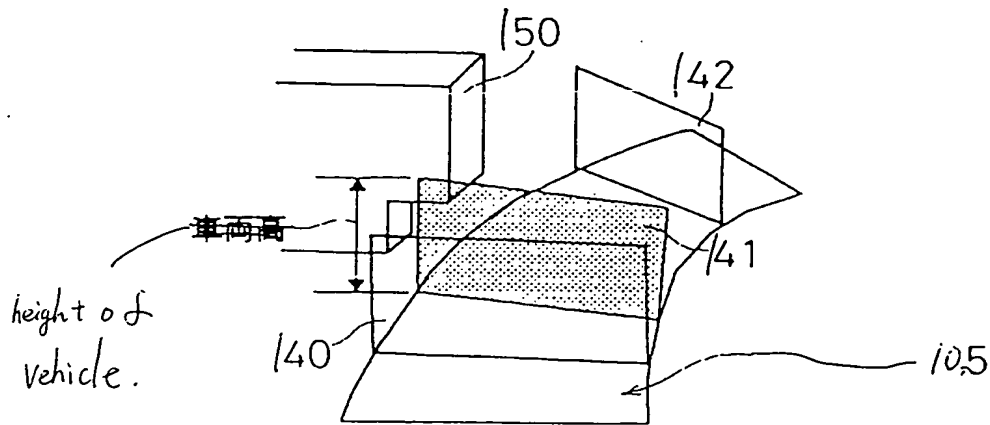
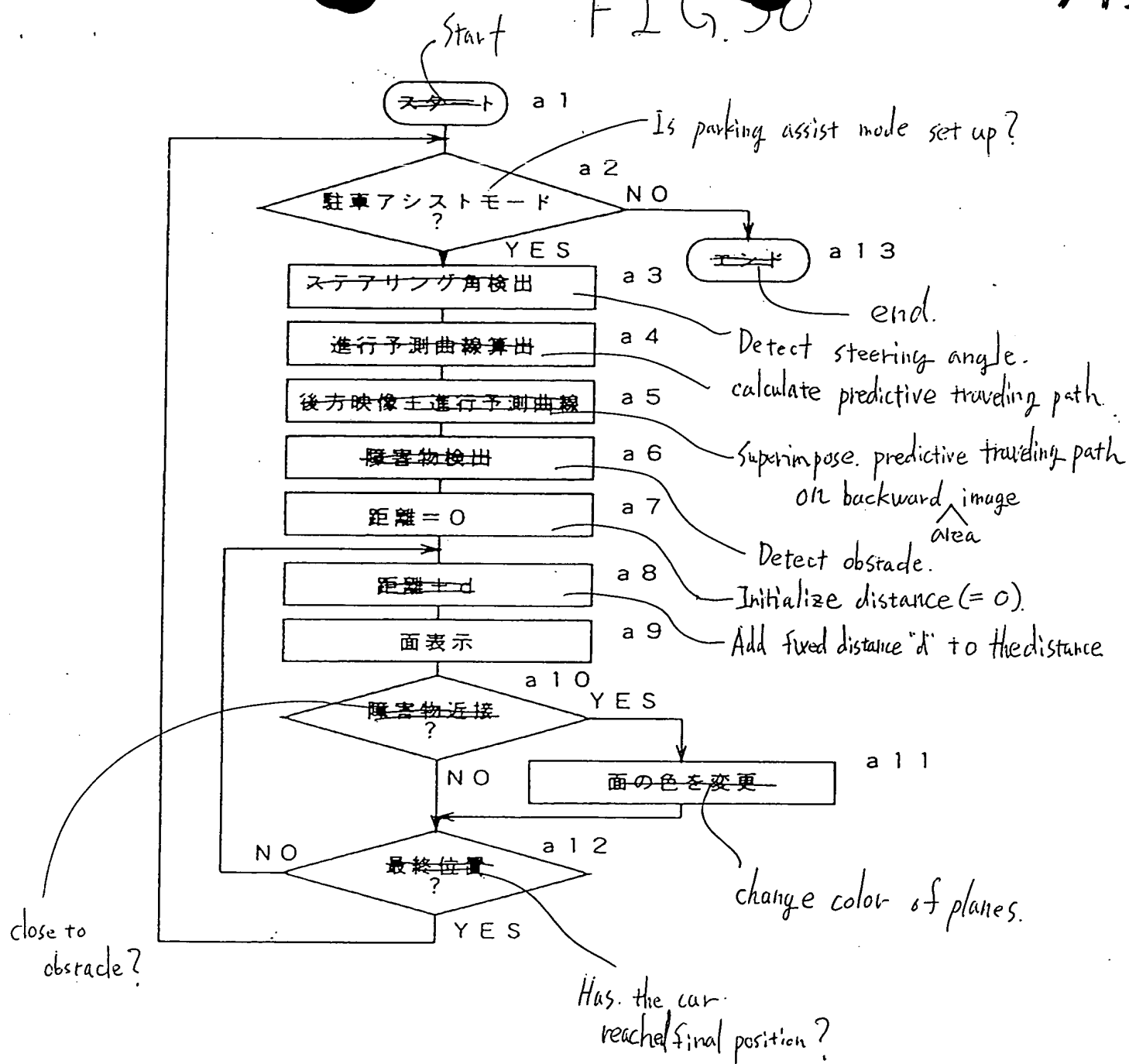


FIG. 28







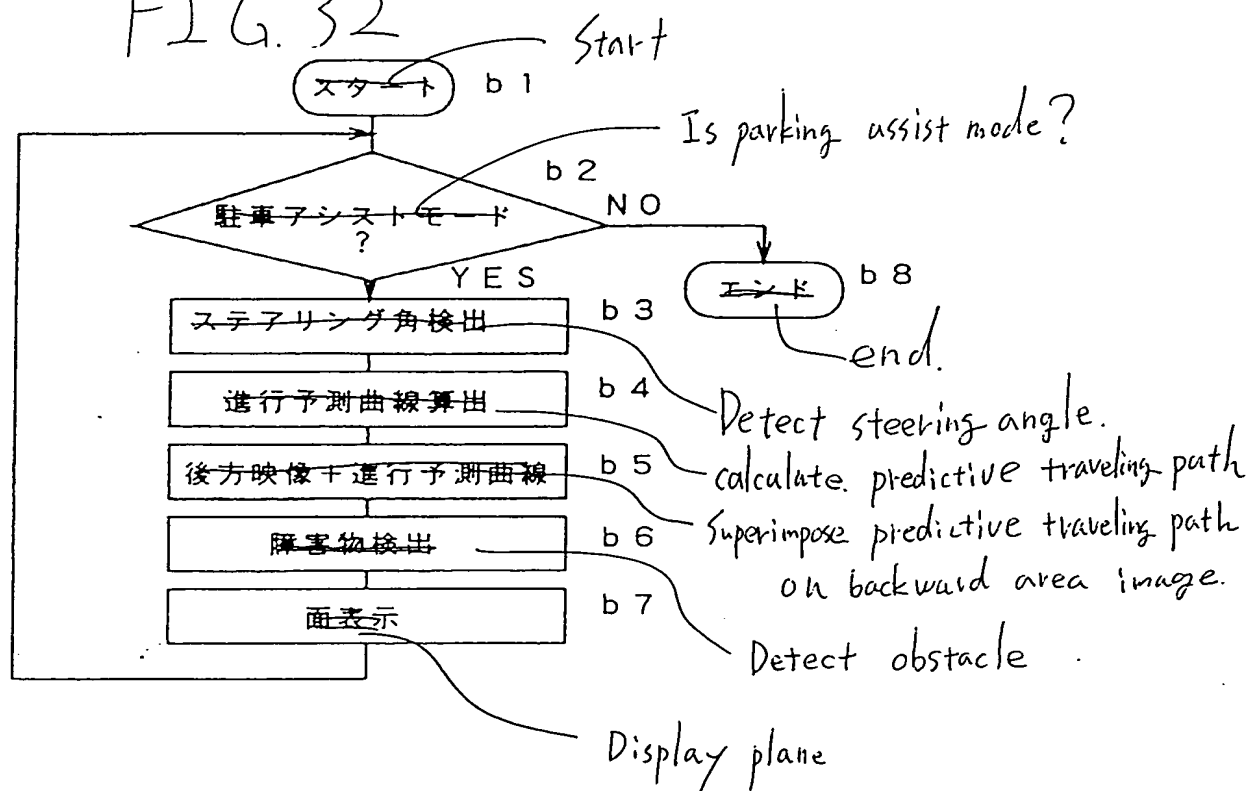
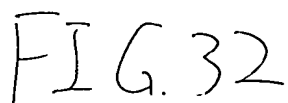
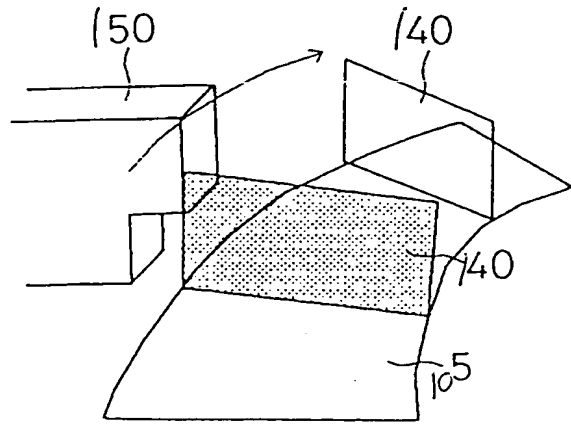


FIG. 33



09598270-062100

09598270-062100

FIG. 34

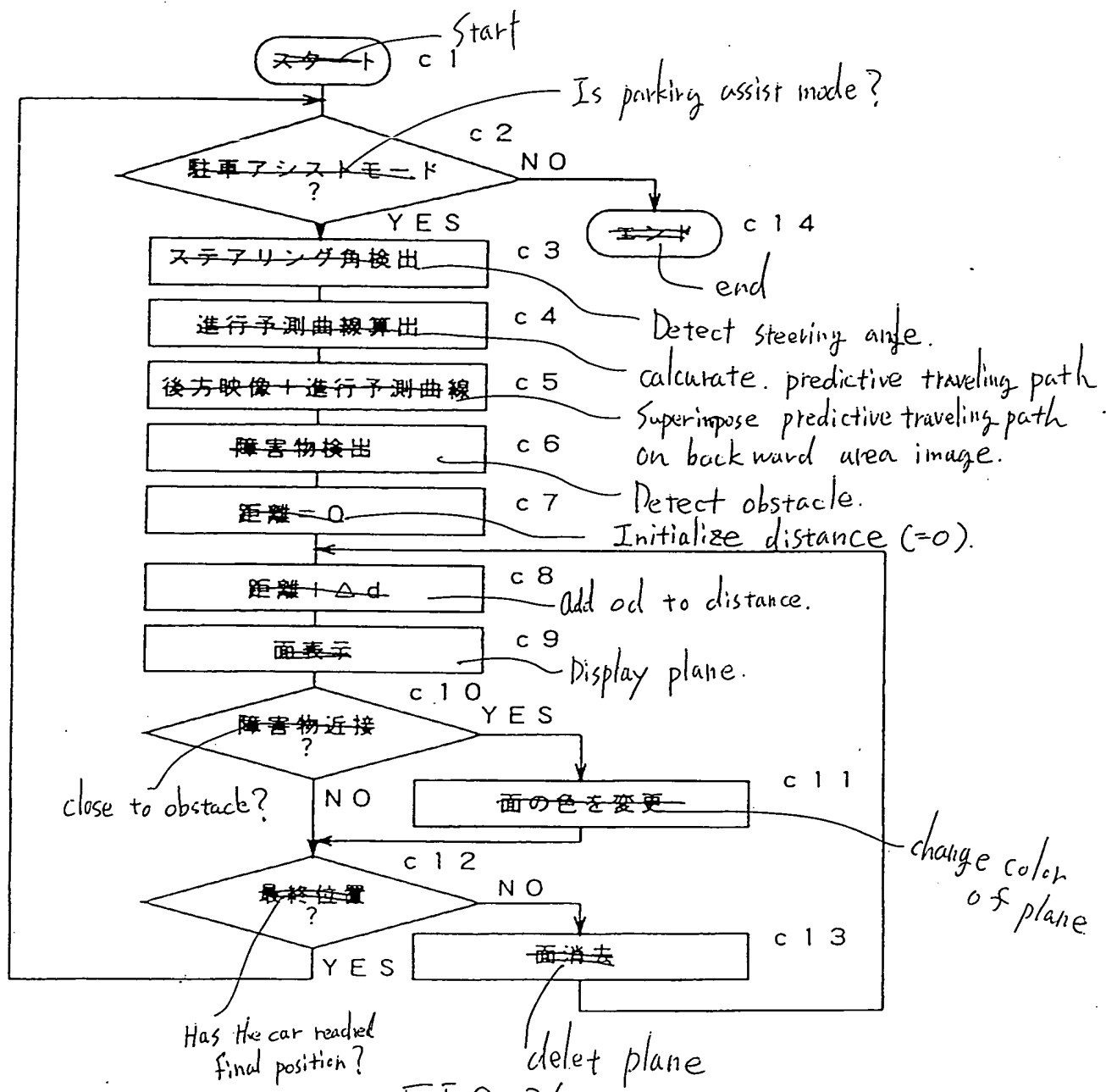
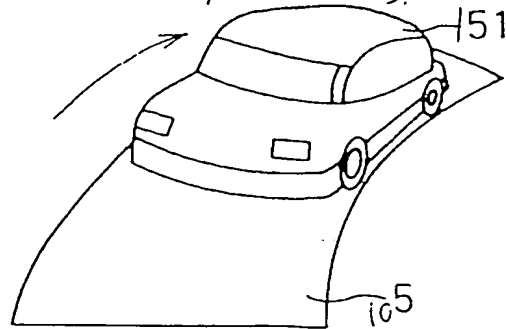


FIG. 35



0012290"062100

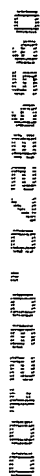


FIG. 37

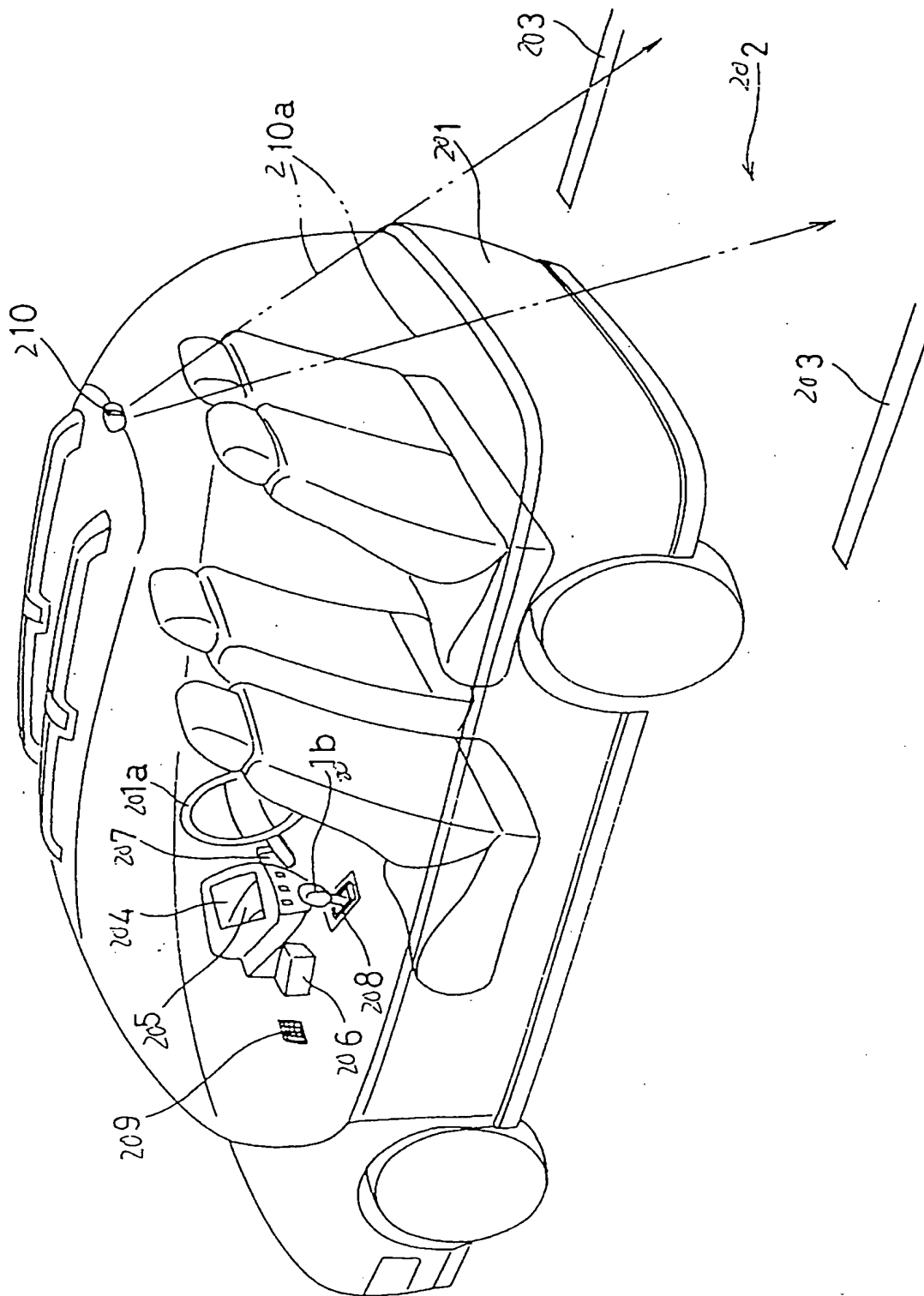


FIG. 38

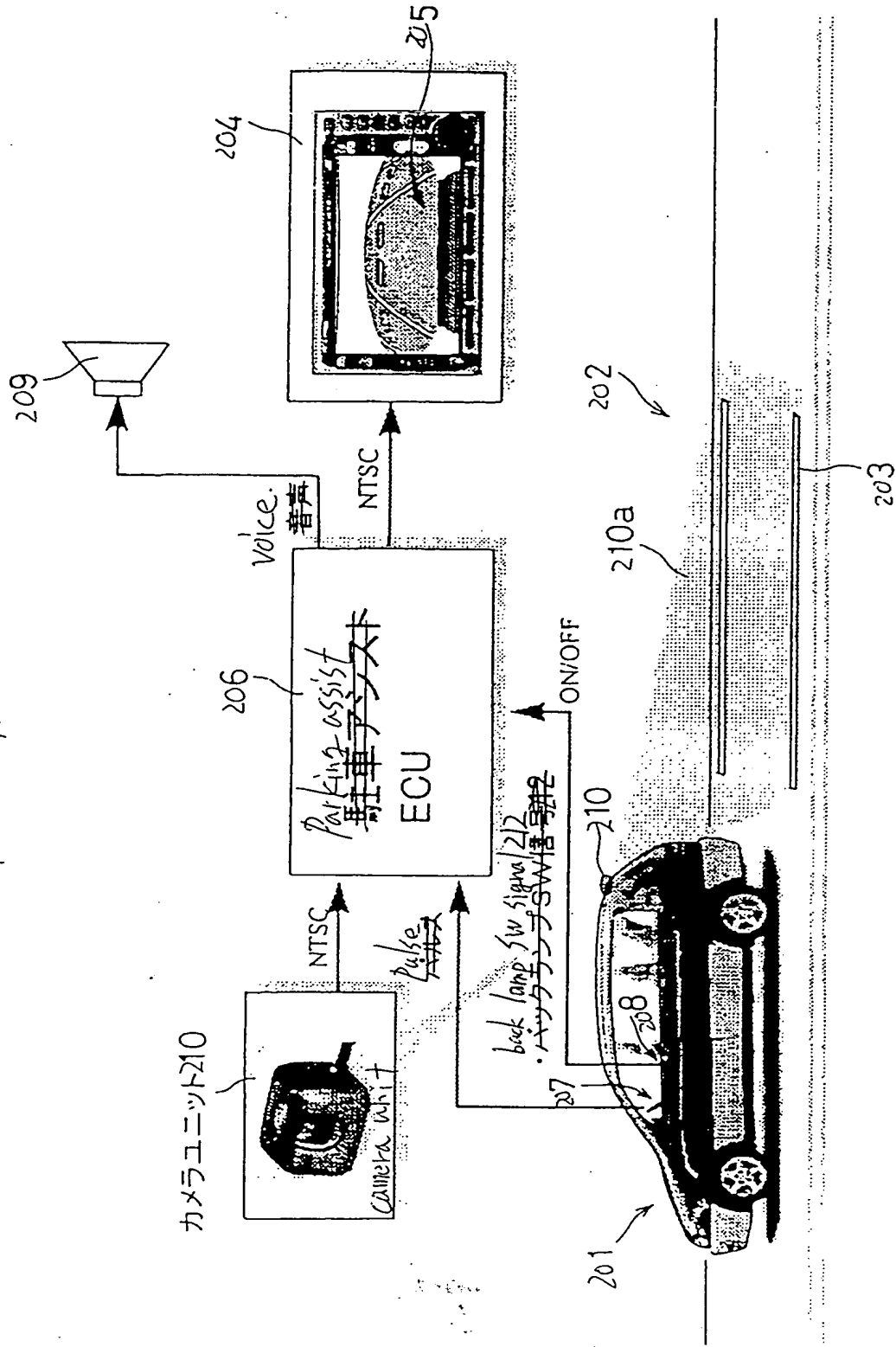


FIG. 39

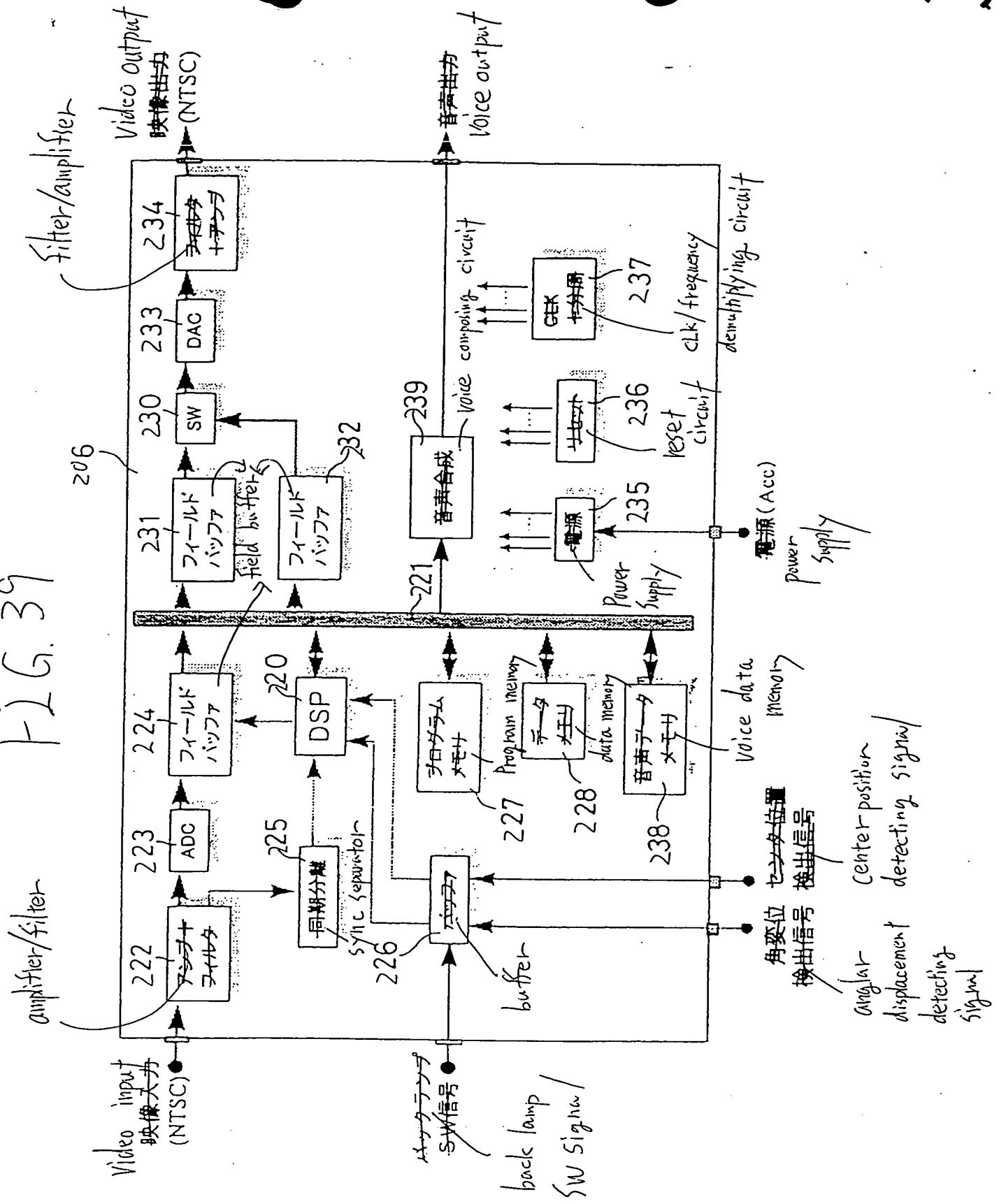
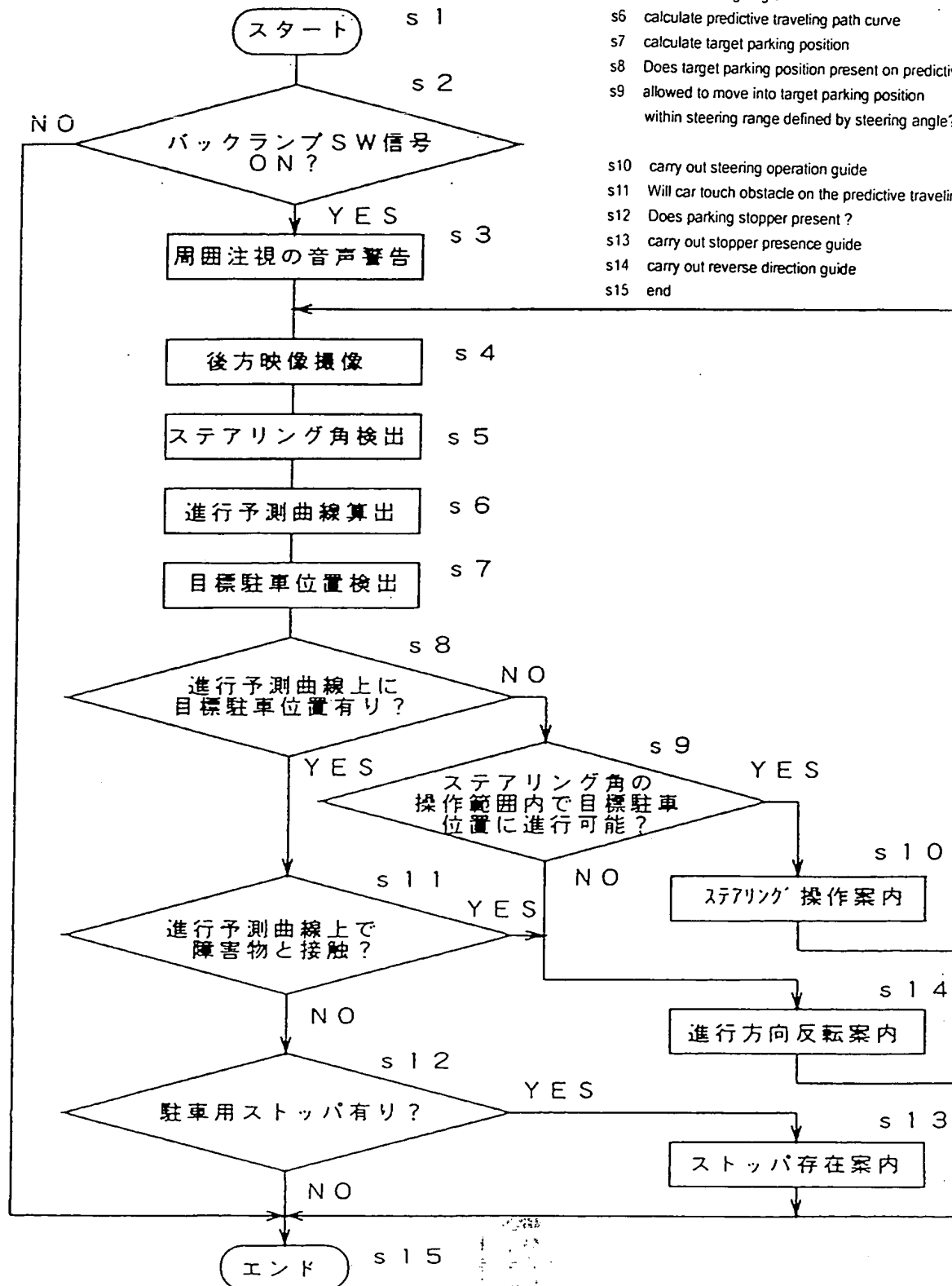


FIG. 40

29/45

- s1 start
- s2 Is back lamp signal in on state?
- s3 sound alarm to watch environment
- s4 pick up backward scene
- s5 detect steering angle
- s6 calculate predictive traveling path curve
- s7 calculate target parking position
- s8 Does target parking position present on predictive traveling path curve?
- s9 allowed to move into target parking position within steering range defined by steering angle?
- s10 carry out steering operation guide
- s11 Will car touch obstacle on the predictive traveling path curve?
- s12 Does parking stopper present?
- s13 carry out stopper presence guide
- s14 carry out reverse direction guide
- s15 end



00558270 062100

FIG. 42

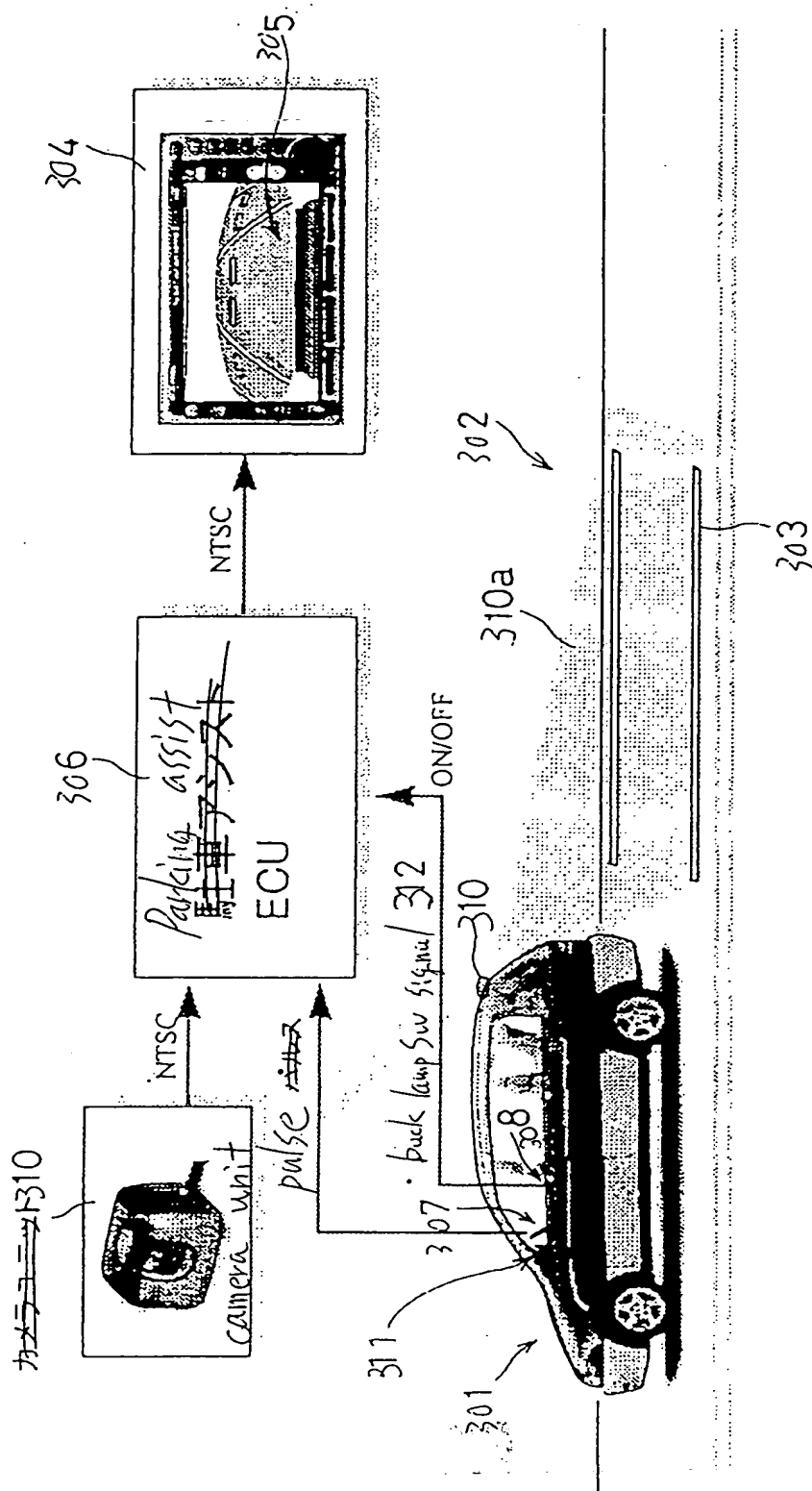


FIG. 43

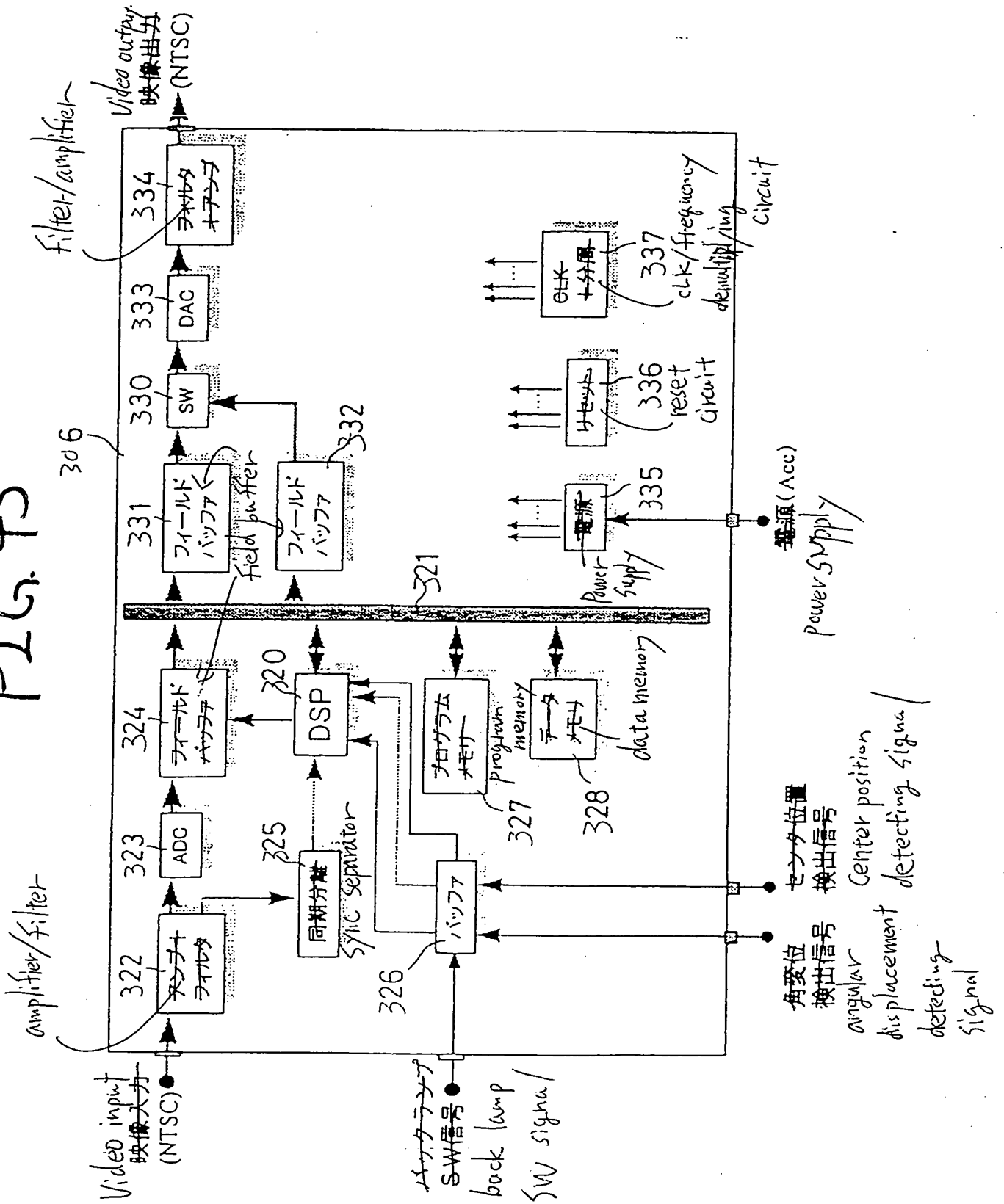
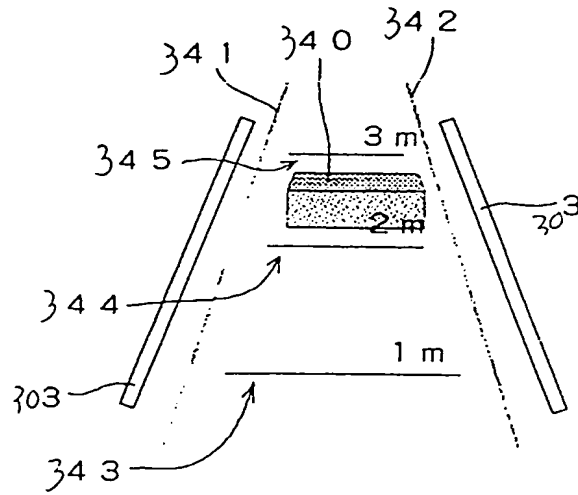


FIG. 44

33/45



001290-0286560

FIG. 45

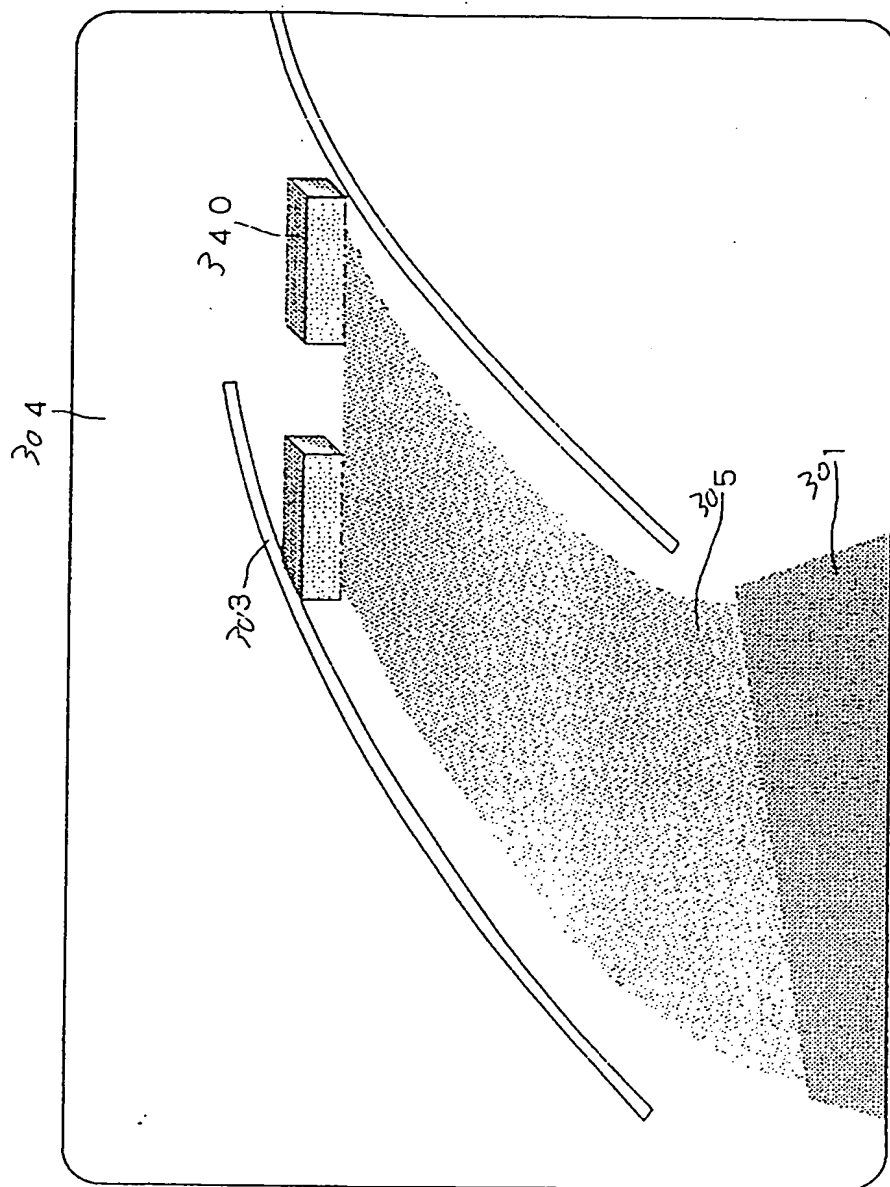


FIG. 46

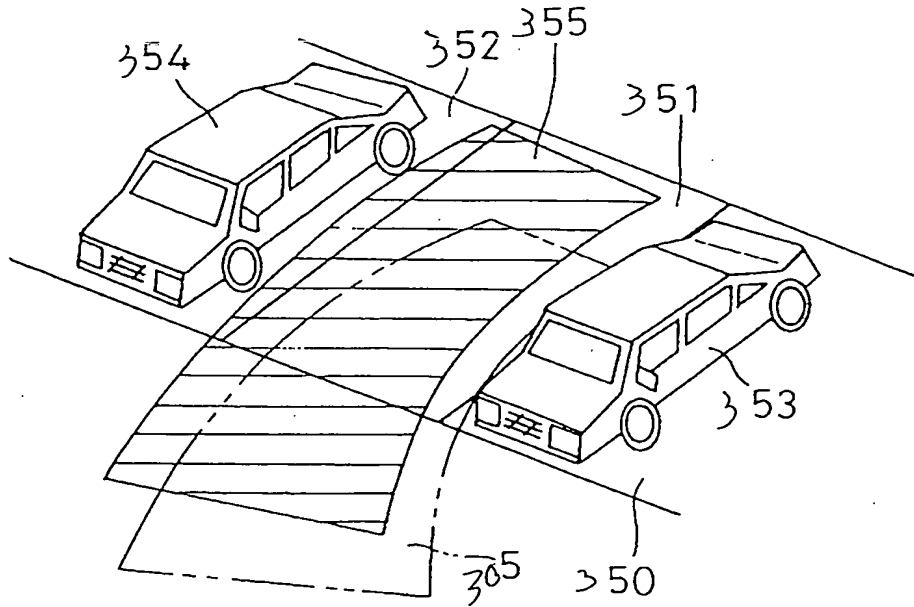


FIG. 46

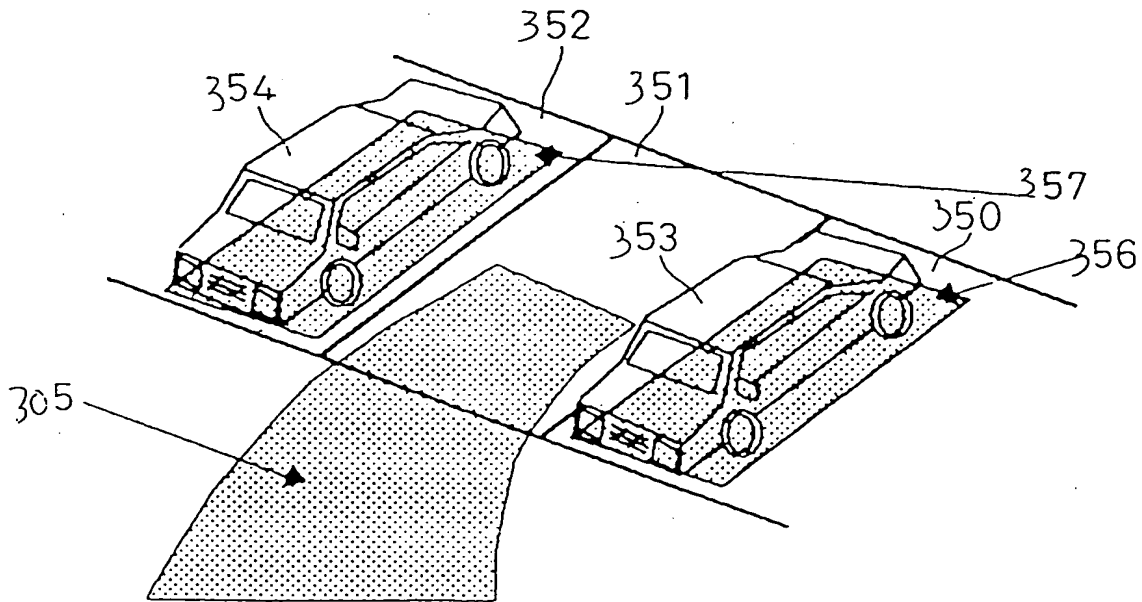
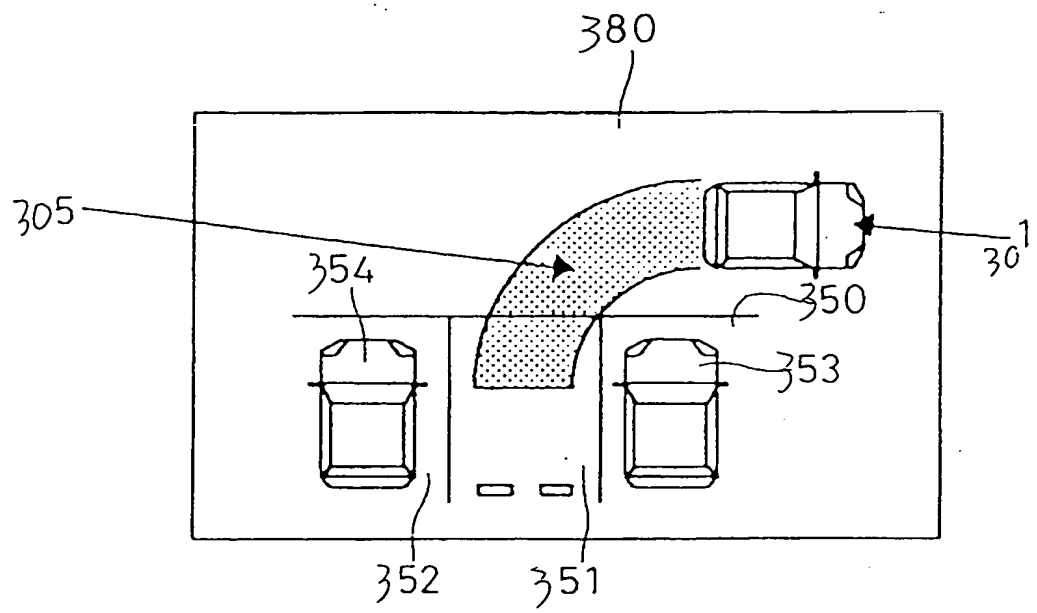
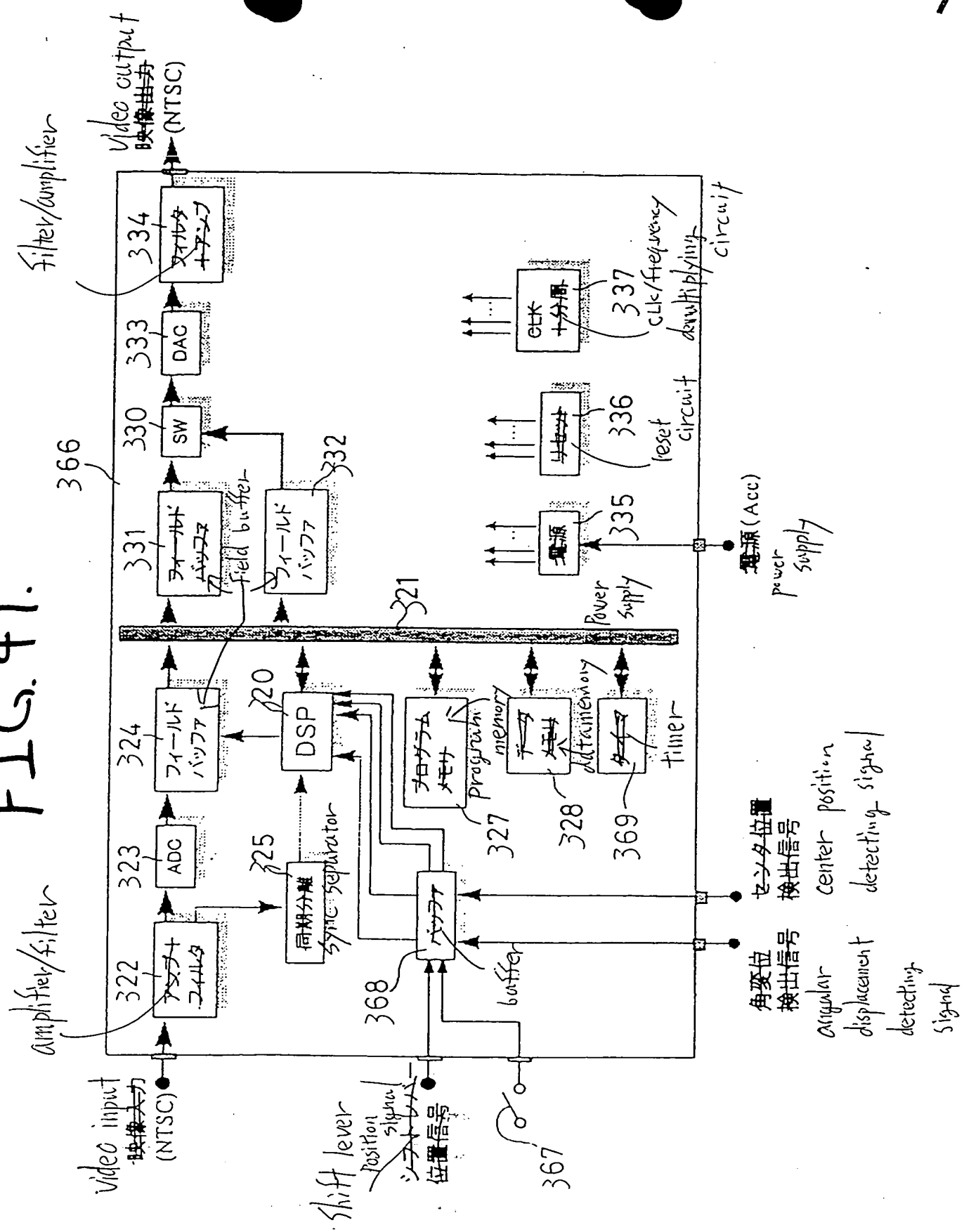


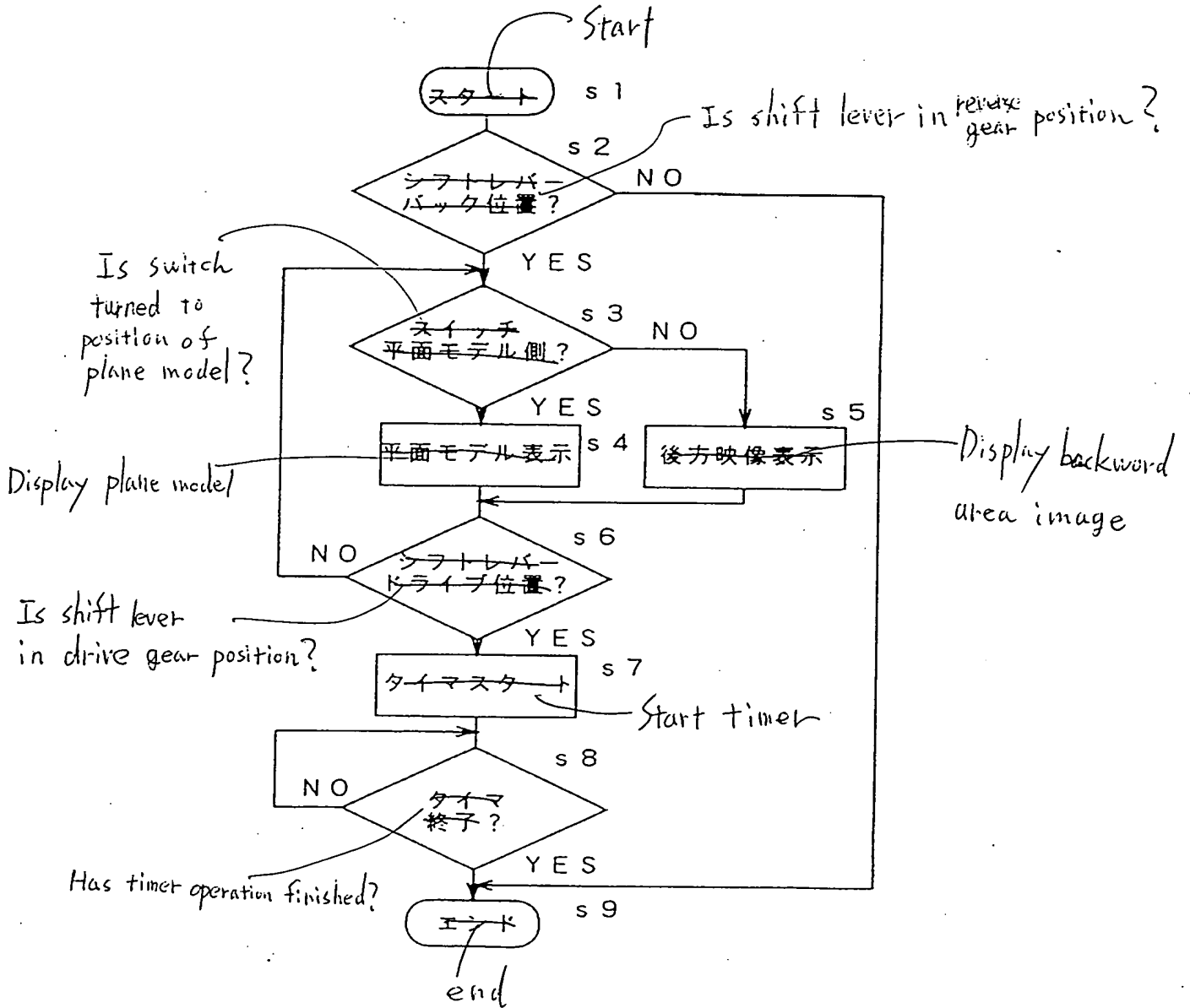
FIG. 47



09598270-062100

FIG. 49.





001290 0288560

FIG. 50

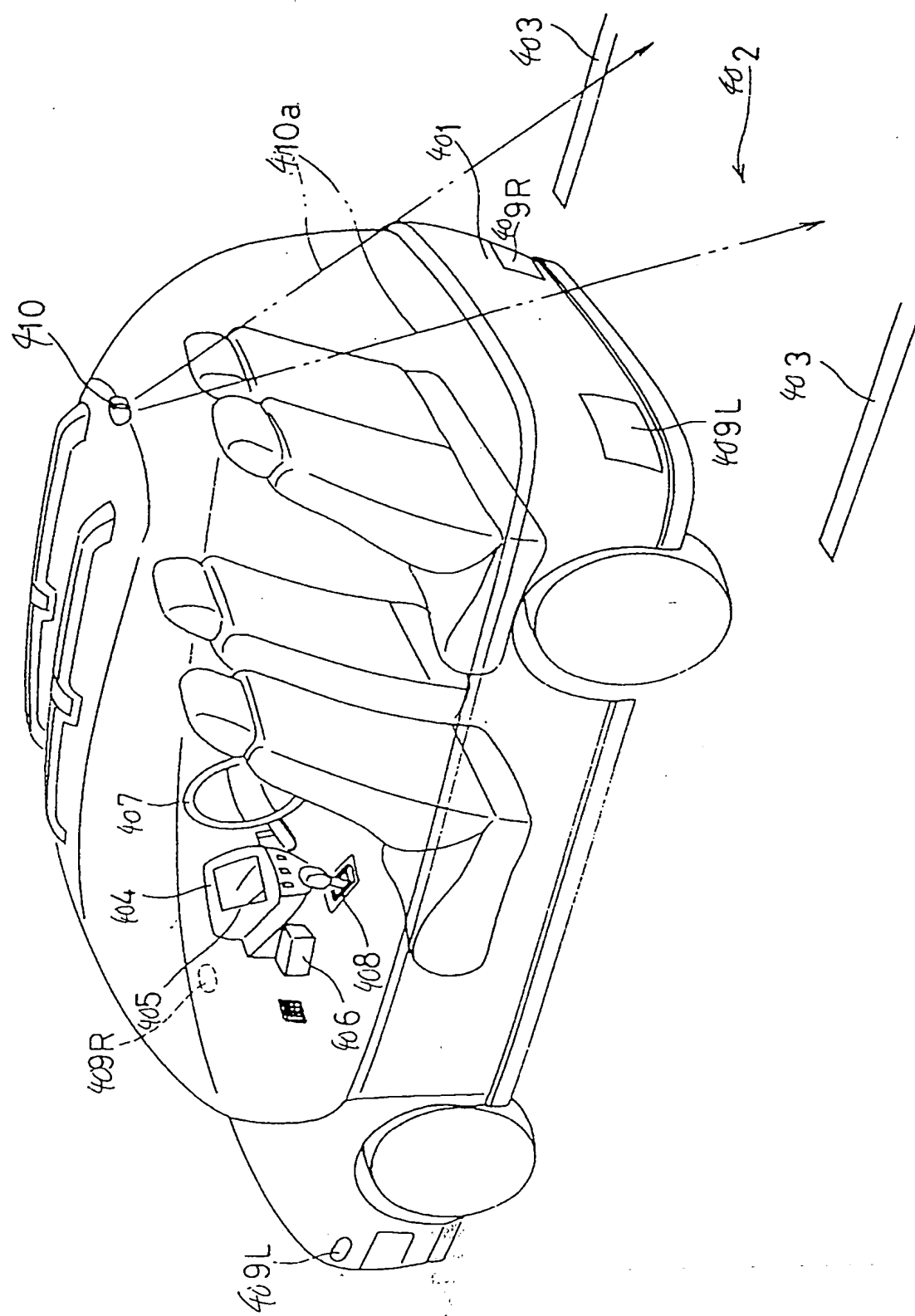


FIG. 51

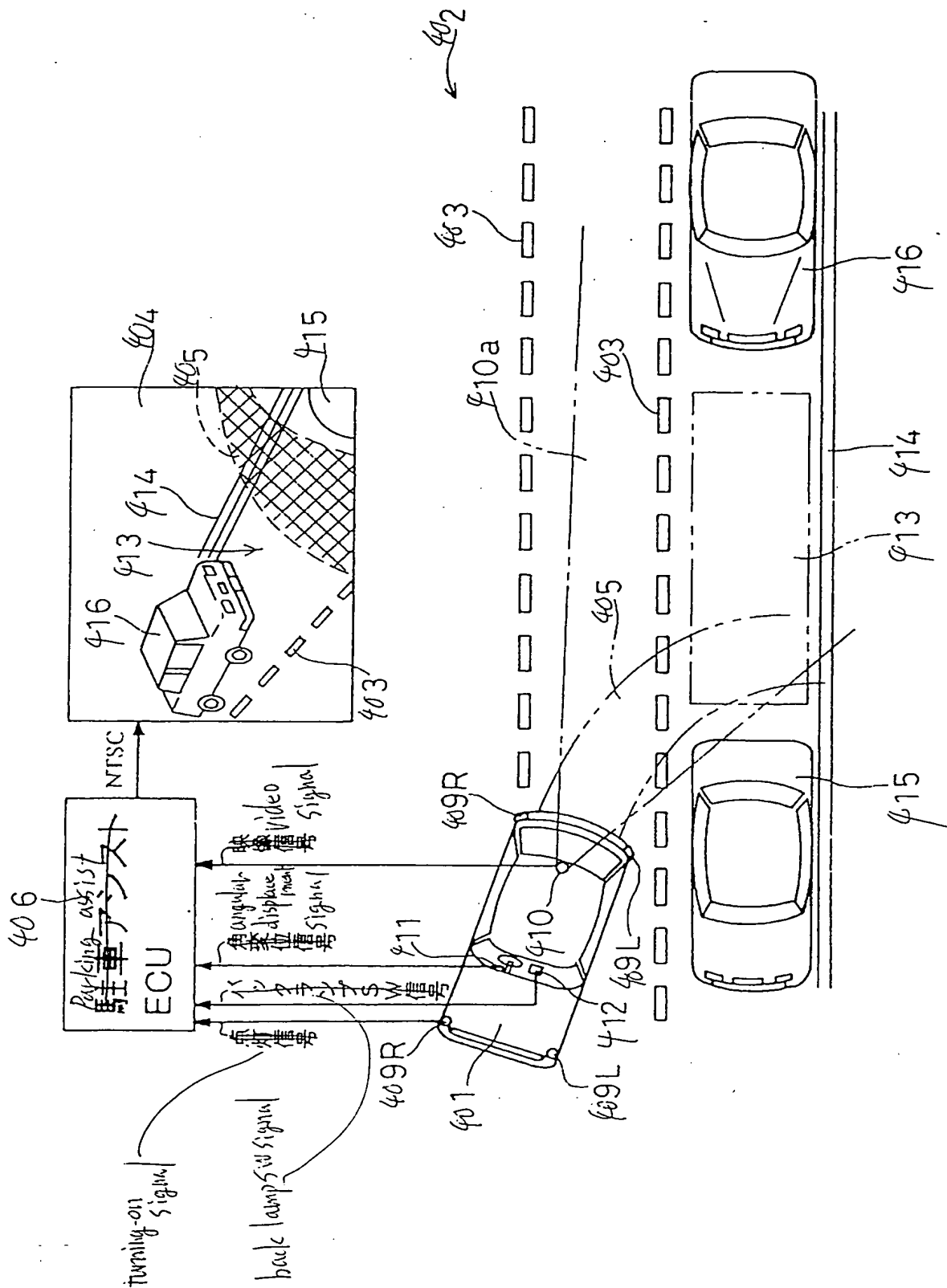


FIG. 53

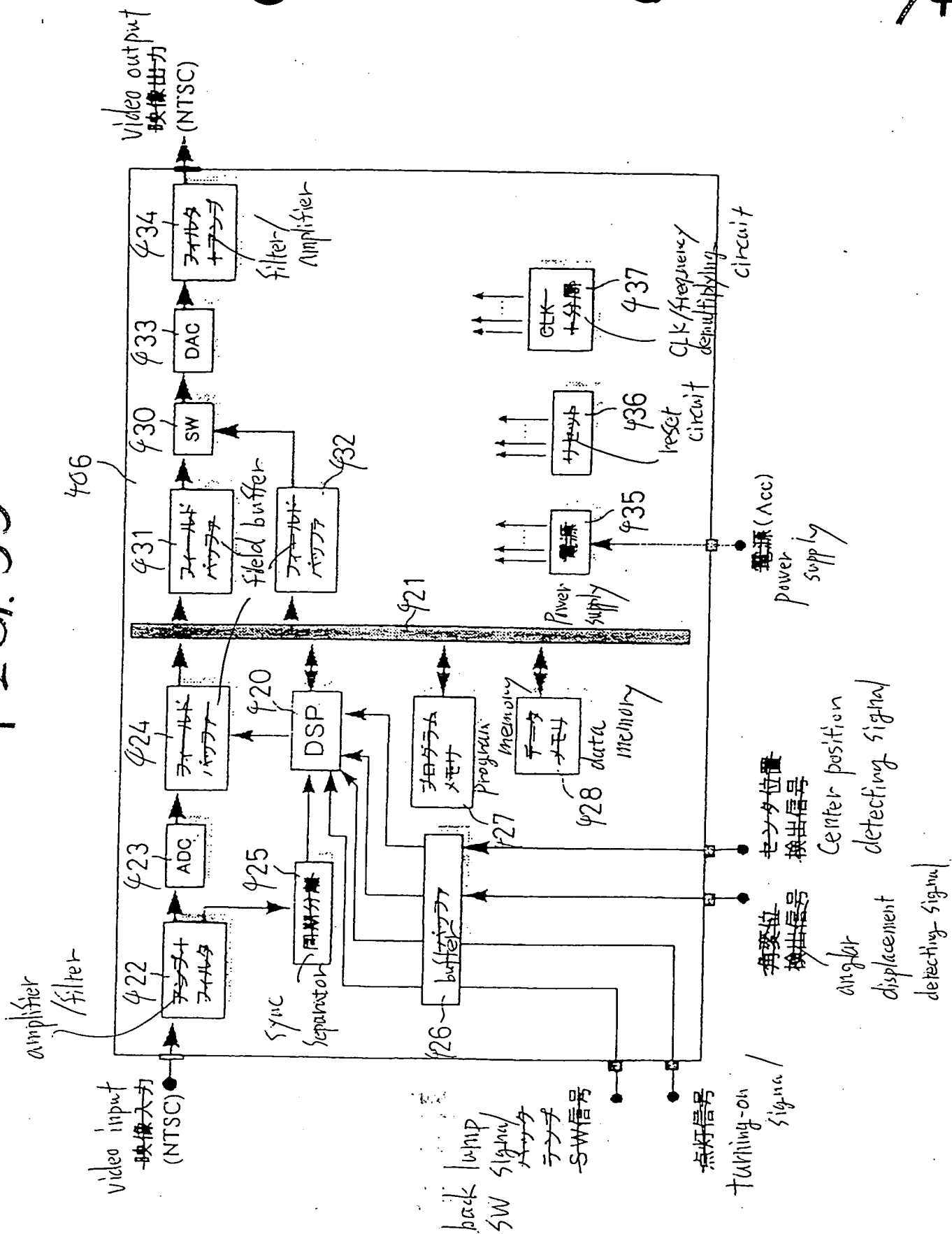


FIG. 59

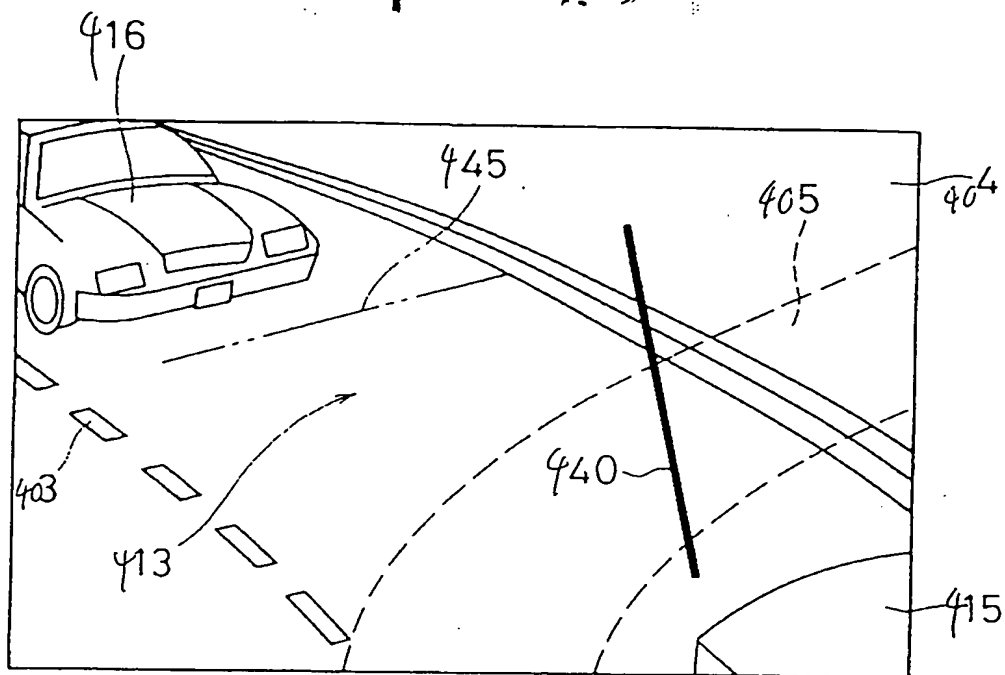
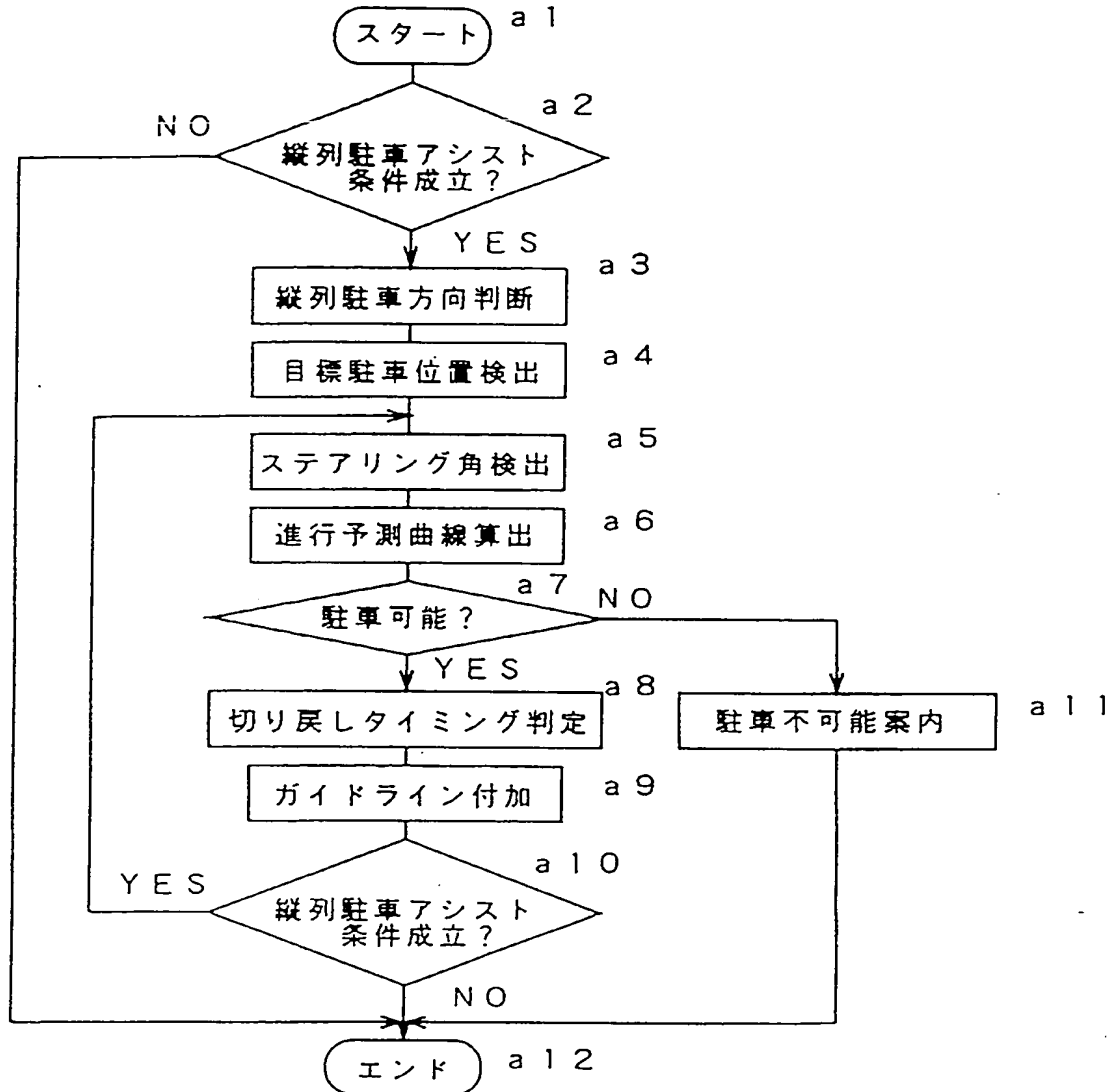


FIG. 55

43/95



- a1 Start
- a2 Is series-parking assist condition hold ?
- a3 Judge road side for the series parking
- a4 Detects target parking position
- a5 Detect steering angle
- a6 Calculate predictive traveling path curve
- a7 Is parking possible ?
- a8 Judge reverse-turn of the steering
- a9 Add guide lines
- a10 Is series-parking assist condition hold ?
- a11 Carry out parking-impossible guide
- a12 End

09598270.062100

FIG. 56

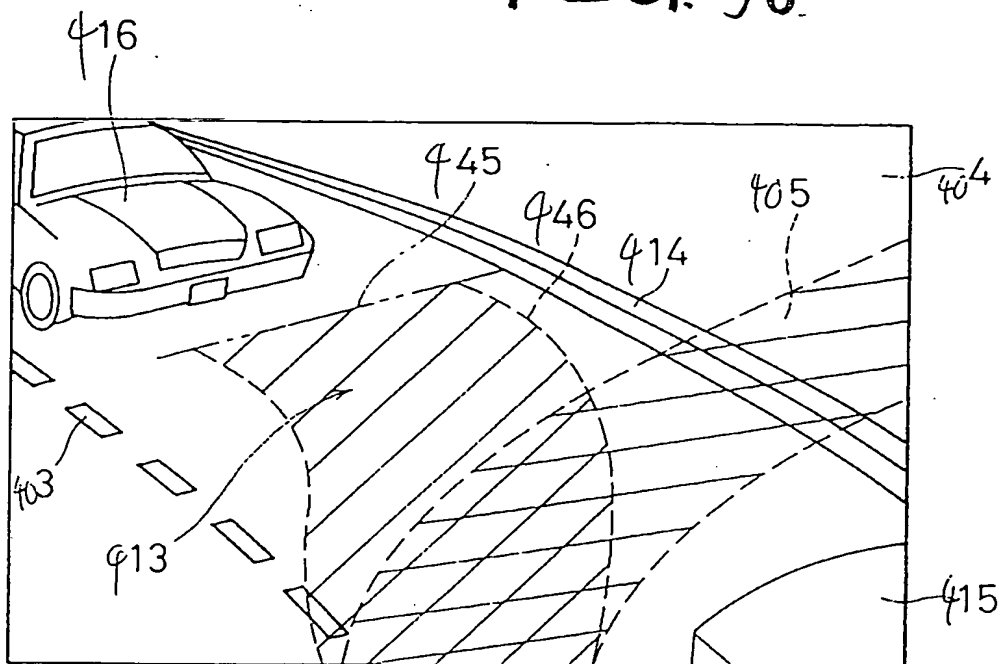
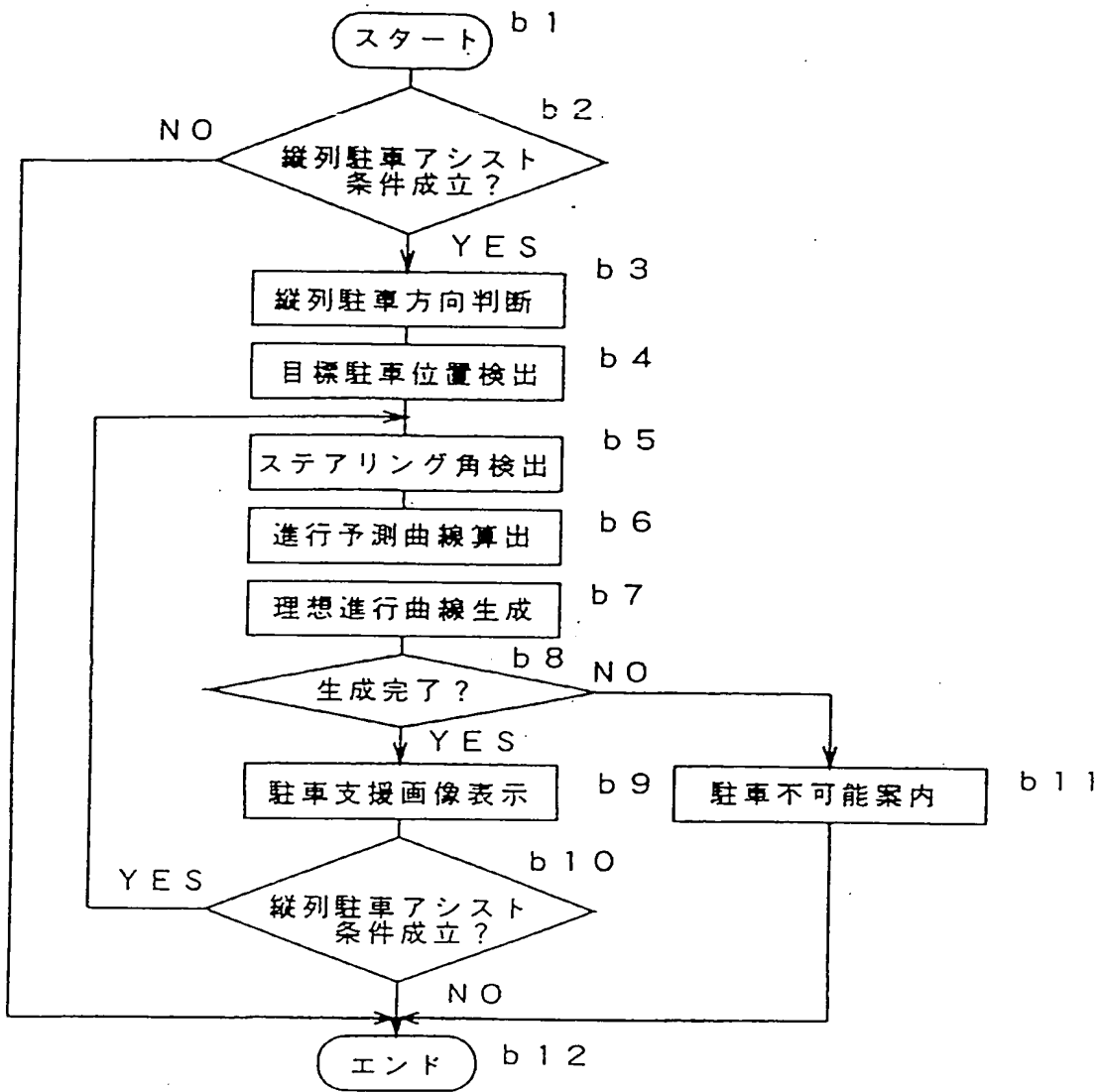


FIG. 5

45/45



- b1 Start
- b2 Is series-parking assist condition hold ?
- b3 Judge the road side for the series parking
- b4 Detects target parking position
- b5 Detect steering angle
- b6 Calculate predictive traveling path curve
- b7 Generate ideal travelling path
- b8 Is ideal travelling path generated ?
- b9 Display a parking assist image
- b10 Is series-parking assist condition hold ?
- b11 Carry out parking-impossible guide
- b12 End

09598270.062100

This Page is inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☐ FADED TEXT OR DRAWING
- ☒ BLURED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLORED OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☐ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☐ REPERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: _____

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images
problems checked, please do not report the
problems to the IFW Image Problem Mailbox**